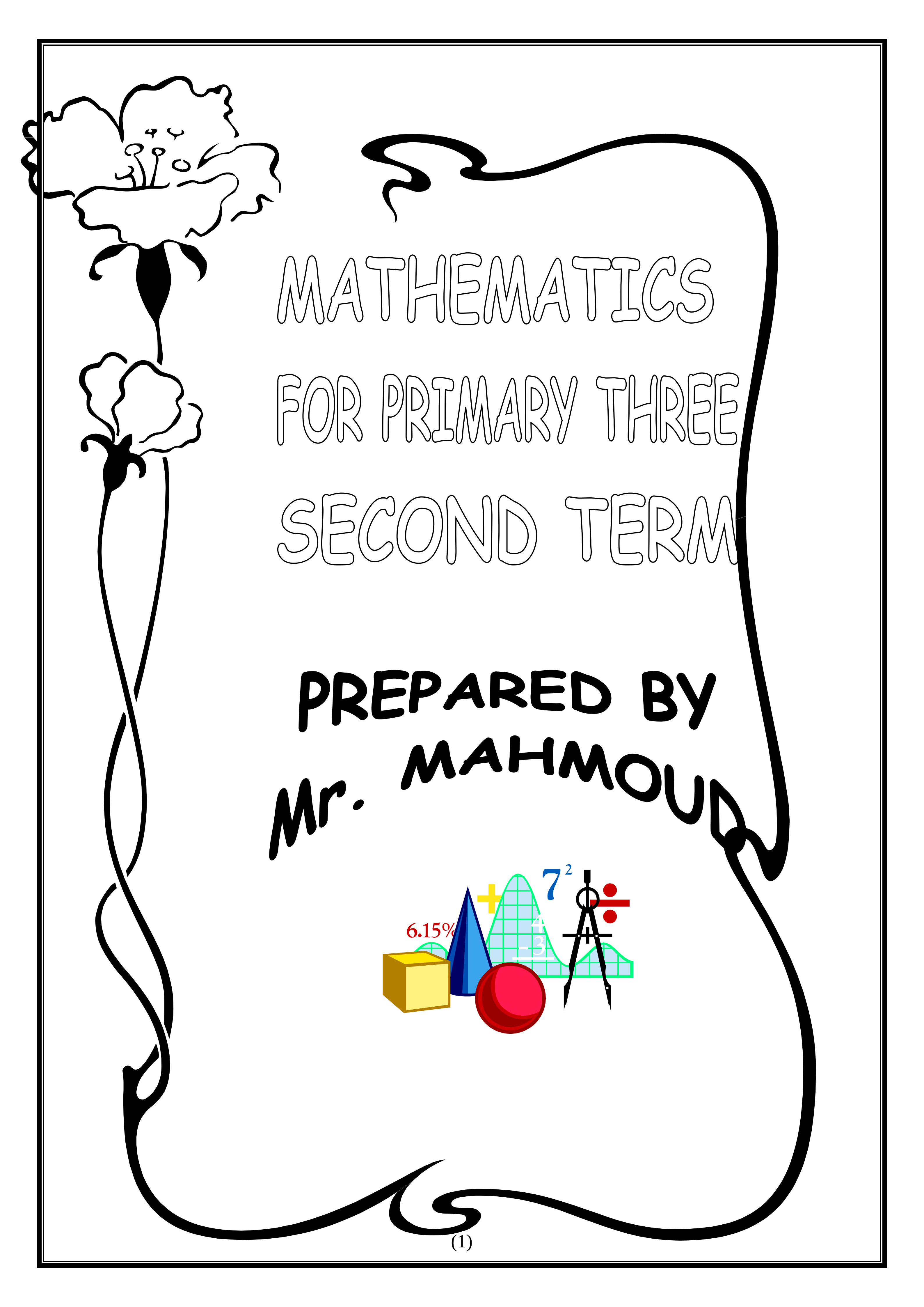

MATHEMATICS
FOR PRIMARY THREE
SECOND TERM
PREPARED BY
Mr. MAHMOUD
6.15%

Unit (1) Multiplication

2	×	1	=	2
2	×	2	=	4
2	×	3	=	6
2	×	4	=	8
2	×	5	=	10
2	×	6	=	12
2	×	7	=	14
2	×	8	=	16
2	×	9	=	18
2	×	10	=	20

3	×	1	=	3
3	×	2	=	6
3	×	3	=	9
3	×	4	=	12
3	×	5	=	15
3	×	6	=	18
3	×	7	=	21
3	×	8	=	24
3	×	9	=	27
3	×	10	=	30

4	×	1	=	4
4	×	2	=	8
4	×	3	=	12
4	×	4	=	16
4	×	5	=	20
4	×	6	=	24
4	×	7	=	28
4	×	8	=	32
4	×	9	=	36
4	×	10	=	40

5	×	1	=	5
5	×	2	=	10
5	×	3	=	15
5	×	4	=	20
5	×	5	=	25
5	×	6	=	30
5	×	7	=	35
5	×	8	=	40
5	×	9	=	45
5	×	10	=	50

6	×	1	=	6
6	×	2	=	12
6	×	3	=	18
6	×	4	=	24
6	×	5	=	30
6	×	6	=	36
6	×	7	=	42
6	×	8	=	48
6	×	9	=	54
6	×	10	=	60

7	×	1	=	7
7	×	2	=	14
7	×	3	=	21
7	×	4	=	28
7	×	5	=	35
7	×	6	=	42
7	×	7	=	49
7	×	8	=	56
7	×	9	=	63
7	×	10	=	70

8	×	1	=	8
8	×	2	=	16
8	×	3	=	24
8	×	4	=	32
8	×	5	=	40
8	×	6	=	48
8	×	7	=	56
8	×	8	=	64
8	×	9	=	72
8	×	10	=	80

9	×	1	=	9
9	×	2	=	18
9	×	3	=	27
9	×	4	=	36
9	×	5	=	45
9	×	6	=	54
9	×	7	=	63
9	×	8	=	72
9	×	9	=	81
9	×	10	=	90

10	×	1	=	10
10	×	2	=	20
10	×	3	=	30
10	×	4	=	40
10	×	5	=	50
10	×	6	=	60
10	×	7	=	70
10	×	8	=	80
10	×	9	=	90
10	×	10	=	100

Remark:

Any number × 0 = 0

Any number × 1 = the same number

Multiplying by 10,100 and 1000 (Multiplying decades)

[1] Complete :

2	×	10	=	....	....	×	10	=	30
7	×	10	=	....	....	×	10	=	60
5	×	10	=	....	....	×	10	=	40
8	×	10	=	....	....	×	10	=	170
9	×	10	=	....	....	×	10	=	700
10	×	10	=	....	....	×	10	=	900
13	×	10	=	....	....	×	10	=	330
15	×	10	=	....	....	×	10	=	450
50	×	10	=	....	....	×	10	=	680
60	×	10	=	....	....	×	10	=	740
12	×	10	=	....	....	×	10	=	6510
23	×	10	=	....	....	×	10	=	890
3	×	100	=	....	....	×	100	=	700
2	×	100	=	....	....	×	100	=	900
8	×	100	=	....	....	×	100	=	1200
12	×	100	=	....	....	×	100	=	6200
16	×	100	=	....	....	×	100	=	3000
18	×	100	=	....	....	×	100	=	6000
20	×	100	=	....	....	×	100	=	1300
40	×	100	=	....	....	×	100	=	15400
50	×	100	=	....	....	×	100	=	97500
130	×	100	=	....	....	×	100	=	10000
2	×	1000	=	....	....	×	1000	=	3000
5	×	1000	=	....	....	×	1000	=	6000
4	×	1000	=	....	....	×	1000	=	8000
7	×	1000	=	....	....	×	1000	=	9000
12	×	1000	=	....	....	×	1000	=	17000
16	×	1000	=	....	....	×	1000	=	19000
18	×	1000	=	....	....	×	1000	=	11000
20	×	1000	=	....	....	×	1000	=	60000
30	×	1000	=	....	....	×	1000	=	40000

120	×	1000	=	....	....	×	1000	=	230000
2	×	....	=	20	30	×	....	=	3000
5	×	....	=	500	6	×	....	=	6000
4	×	....	=	4000	800	×	....	=	8000
7	×	....	=	7000	90	×	....	=	9000
12	×	....	=	120	17	×	....	=	17000
16	×	....	=	16000	190	×	....	=	19000
18	×	....	=	1800	1100	×	....	=	11000
20	×	....	=	200	600	×	....	=	60000
30	×	....	=	30000	40	×	....	=	40000
120	×	....	=	1200	2300	×	....	=	230000

[2] Complete:

ⓐ 7 × 10 = = tens

ⓑ 5 × 10 = = tens

ⓒ × 10 = 30 = tens

ⓓ × 10 = 40 = tens

ⓔ 125 × 10 = = tens

ⓕ × 10 = = 275 tens

[3] Complete:

ⓐ 10 × = 10 + 80

ⓑ 10 × = 10 + 90

ⓒ 10 × = 10 + 100

ⓓ 10 × = 10 + 250

ⓔ 10 + 800 = 10 ×

ⓕ tens = 10 + 500

ⓖ 📖 5 tens + 3 tens = × 10

ⓗ 2 tens + 7 tens = 10 ×

ⓘ 4 tens + tens = 7 × 10

ⓙ tens + 2 tens = 5 × 10

[4] Complete:

ⓐ $40 \times 2 =$

ⓑ $30 \times 5 =$

ⓒ $8 \times 60 =$

ⓓ $7 \times 50 =$

ⓔ $20 \times 3 =$

ⓕ $70 \times 9 =$

ⓖ $4 \times 60 =$

ⓗ $8 \times 50 =$

[5] Complete:

ⓐ $8 \times 100 =$ = hundreds

ⓑ $25 \times 100 =$ = hundreds

ⓒ $\times 100 = 400 =$ hundreds

ⓓ $\times 100 =$ = 5 hundreds

ⓔ $\times 100 =$ = 10 hundreds

ⓕ $\times 100 =$ = 30 hundreds



[6] Real life Problems:

1) Hany bought 7 books for PT 100 each. What is the price of books ?

The price of books = …………… ……………… = **P.T.** ………………

2) A merchant has 45 boxes of soap, each of 10 bars, he sold 270 bars. How many bars were left?

Number of bars in boxes = ………… ………… = …………… **bars**

Number of left bars = ………… …………… = ……………… **bars**

3) Noura bought 10 notebooks for three pounds each and 2 books for ten pounds each. How much did noura pay?

Price of notebooks = ……… ………… = ………… pounds

Price of books = ……… ………… = ………… pounds

She paid = ………… ………… = ………… pounds

Remember:

Kilogram = 1000 grams, kilometre = 1000 metres, metre = 100 centimetres

[1] Complete:

ⓐ 📖 7 metres = ______ centimetres.

ⓑ 📖 9 metres = ______ centimetres.

ⓒ 📖 25 metres = ______ centimetres.

ⓓ 57 metres = ______ cm.

ⓔ ______ metres = 400 cm.

ⓕ ______ metres = 1 500 centimetres.

ⓖ ______ metres = 1 000 centimetres.

[2] Complete:

ⓐ 8 pounds = ______ piastres.

ⓑ 4 pounds = ______ piastres.

ⓒ ______ pounds = 900 piastres.

ⓓ ______ pounds = 2 500 piastres.

ⓔ 312 pounds = ______ piastres.

ⓕ ______ pounds = 10 000 piastres.

[3] Complete:

ⓐ $300 \times 3 =$

ⓑ $800 \times 6 =$

ⓒ $7 \times 400 =$

ⓓ $5 \times 900 =$

ⓔ $40 \times 60 =$

ⓕ $30 \times 90 =$

ⓖ $50 \times 30 =$

ⓗ $60 \times 60 =$

[4] Complete using (<), (>) or (=):

ⓐ 9 × 1 ☐ 100 × 11

ⓑ 🕮 52 × 1 ☐ 25 × 100

ⓒ 🕮 18 × ☐ 8 × 100

ⓓ 6 × 1 ☐ 6 + 100

ⓔ 🕮 6 × 1 ☐ 2 × 3 × 10

ⓕ 🕮 2 × 7 × 1 ☐ 14 × 10

ⓖ 10 × 1 ☐ 100 × 17

ⓗ 8 × 1 ☐ 80 × 5

ⓘ 50 × ☐ 4 × 100

ⓙ 20 × ☐ 3 × 300

ⓚ 18 × 1 ☐ 180 + 100

ⓛ 5 × 1 ☐ 600 – 50

ⓜ 🕮 Seven hundr ☐ 7 × 100

ⓝ 70 te ☐ 20 × 30

ⓞ 🕮 6 me ☐ 500 centimetres

ⓟ 34 pou ☐ 4 300 piastres

Multiplying a 2-digit and a 3-digit number by a 1-digit number

[5] Find the result of each of the following:

$53 \times 2 = ...$	$36 \times 4 = ...$	$25 \times 6 = ...$	$19 \times 5 = ...$	$45 \times 7 = ...$
$563 \times 2 = ...$	$264 \times 4 = ...$	$147 \times 6 = ...$	$105 \times 3 = ...$	$405 \times 3 = ...$

[6] Find the result of each of the following:

(a) 56×3	(b) 53×4	(c) 72×6
(d) 48×7	(e) 27×8	(f) 236×4
(g) 348×6	(h) 635×5	(i) 128×6
(j) 316×9	(k) 2234×2	(l) 6234×3
(m) 5489×4	(n) 6743×9	(o) 2347×5

[7] Real life Problems:

(1) Tamer bought 3 toys for 15 pounds each. How much money did he pay?

He paid = ………………… ……………… = …………………… pounds.

(2) The price of 1 kg of potatoes is P.T. 150. Find the price of 8 kg.

The price = ………………… ……………… = P.T. ……………………

(3) Ahmed bought 6 kg of apples for P.T. 800 each and 5 kg of oranges for P.T. 200 each. How much money did he pay?

The price of apples = ………………… ……………… = P.T. ……………………

The price of oranges = ………………… ……………… = P.T. ……………………

He paid = ………………… ……………… = P.T. ……………………

Even numbers and odd numbers

Even numbers :

The numbers whose units digit is 0 , 2 , 4 , 6 or 8 are called even numbers.
For Example : 6 , 12 , 34 , 578 and 990 are even numbers.

Odd numbers :

The numbers whose units digit is 1 , 3 , 5 , 7 or 9 are called odd numbers.
For Example : 3 , 11 , 25 , 103 , 217 and 4 219 are odd numbers.

[1] Circle the odd numbers

200 15 63 20 84 913 910 212 214 155 473 477

[2] Circle the even numbers

48 51 127 367 45 13 485 44 222 28 121 415

[3] Write (even) or (odd):

ⓐ 12 (even)	ⓑ 17 (odd)	ⓒ 60 ( )
ⓓ 51 ( )	ⓔ 0 ( )	ⓕ 99 ( )
ⓖ 67 ( )	ⓗ 144 ( )	ⓘ 215 ( )
ⓙ 243 ( )	ⓚ 438 ( )	ⓛ 666 ( )

[4] Complete:

ⓐ The even number just after 6 is

ⓑ The odd number just before 14 is

ⓒ The even number that lies between 12 and 16 is

ⓓ The two even numbers that lie between 5 and 9 are and

ⓔ The two odd numbers that lie between 30 and 35 are and

ⓕ The two odd numbers less then 5 are and

ⓖ The two even numbers less than 4 are and

ⓗ 2 , and 10 are three even numbers , its sum = 20

[5] Complete:

- An even number + an even number = ……………………

- An odd number + an odd number = ……………………

- An even number + an odd number = ……………………

- Write two consecutive even numbers given that 42 is the smaller number of them.
  The two numbers are ………………… and ……………………

- Write two consecutive odd numbers given that 13 is the greater number of them.
  The two numbers are ………………… and …………………

- Write two consecutive odd numbers given that the product of them is 15.
  The two numbers are ………………… and …………………

- Write two consecutive even numbers given that the product of them is 8.
  The two numbers are …………………… and …………………

- Write two even numbers whose sum is 100.
  The two numbers are …………………… and …………………

- Write two odd numbers whose sum is 100.
  The two numbers are …………………… and …………………

[6] Complete:



ⓐ Any even number + 1 = number

ⓑ Any odd number + 1 = number

ⓒ Any odd number – 1 = number

ⓓ Any even number + 2 = number

ⓔ Any odd number + 2 = number

[7] Choose the correct answer:

ⓐ Two consecutive odd numbers whose sum is 12 are

(6 and 7 ***or*** 4 and 8 ***or*** 5 and 7)

ⓑ Two consecutive even numbers whose sum is 22 are

(20 and 2 ***or*** 10 and 12 ***or*** 9 and 13)

ⓒ Two even numbers their sum is 60 are

(29 and 31 ***or*** 28 and 32 ***or*** 32 and 24)

ⓓ The product of two consecutive even numbers is 24, then these two numbers are (1 and 24 ***or*** 2 and 12 ***or*** 4 and 6)

[8] Find:

ⓐ Two consecutive even numbers whose sum is 10 ,

ⓑ Two consecutive odd numbers whose sum is 12 ,

ⓒ Two consecutive even numbers whose product is 8 ,

ⓓ Two odd numbers their sum is 100 ,

ⓔ Two even numbers their sum is 100 ,

Division OPERATION

Divisor

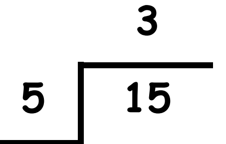
$$6 \div 2 = 3$$

Dividend Quotient

It is read as: Six divided by 2 equals three

There are three ways to express the division operation:

$15 \div 5 = 3$ $\frac{15}{5} = 3$



Remarks:

(1) If the number is divided by itself, the result is 1 "except zero".
For Example: $5 \div 5 = 1$, $6 \div 6 = 1$, $17 \div 17 = 1$

(2) If the number is divided by 1, the result is the same number.
For Example: $7 \div 1 = 7$, $8 \div 1 = 8$, $23 \div 1 = 23$

(3) Zero divided by any number, the result is 0 "except zero"
For Example: $0 \div 6 = 0$, $0 \div 12 = 0$, $0 \div 124 = 0$

(4) Dividing any number by zero is undefined.

[1] Find the quotient:

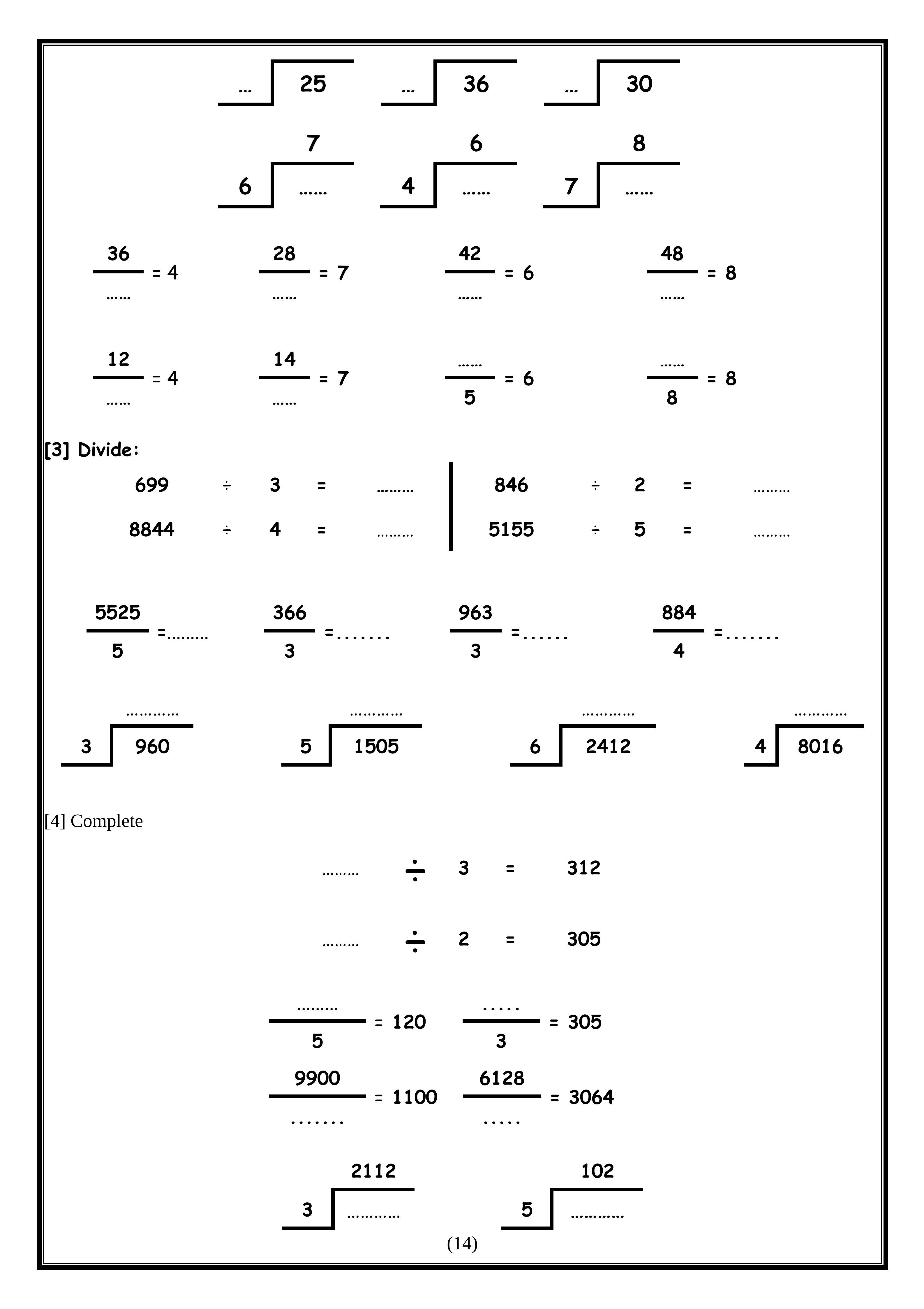
45 ÷ 9 = ……	32 ÷ 8 = ……	35 ÷ 7 = ……
36 ÷ 4 = ……	28 ÷ 4 = ……	40 ÷ 8 = ……

9 ⟌ 6 3 (quotient ……)   6 ⟌ 4 8 (quotient ……) $\frac{60}{6}$ = …… $\frac{24}{4}$ =…… $\frac{15}{3}$ =……

[2] Complete:

25 ÷ ……… = 5	……… ÷ 6 = 8
36 ÷ ……… = 9	……… ÷ 7 = 3

5 9 5



... ⟌ 25   ... ⟌ 36   ... ⟌ 30

6 ⟌ ...... (quotient 7)   4 ⟌ ...... (quotient 6)   7 ⟌ ...... (quotient 8)

$\frac{36}{......} = 4$ $\frac{28}{......} = 7$ $\frac{42}{......} = 6$ $\frac{48}{......} = 8$

$\frac{12}{......} = 4$ $\frac{14}{......} = 7$ $\frac{......}{5} = 6$ $\frac{......}{8} = 8$

[3] Divide:

699	÷	3	=	....	846	÷	2	=	....
8844	÷	4	=	....	5155	÷	5	=	....

$\frac{5525}{5}$ =......... $\frac{366}{3}$ =....... $\frac{963}{3}$ =...... $\frac{884}{4}$ =.......

3 ⟌ 960 (quotient ....)   5 ⟌ 1505 (quotient ....)   6 ⟌ 2412 (quotient ....)   4 ⟌ 8016 (quotient ....)

[4] Complete

.... ÷ 3 = 312

.... ÷ 2 = 305

$\frac{.........}{5} = 120$ $\frac{.....}{3} = 305$

$\frac{9900}{.......} = 1100$ $\frac{6128}{.....} = 3064$

3 ⟌ .... (quotient 2112)   5 ⟌ .... (quotient 102)

Real life problems

(1) How many threes are there in 18? There are = …… ÷ …… = ……

(2) How many twos are there in 16? There are = …… ÷ …… = ………

(3) Mona paid L.E. 18 to by 6 pencils of the same kind. What is the price of each pencil?
The price of each pencil = ……………………………… = L.E. …………

(4) How many plates are needed for 24 pieces of cakes, if each plate has 3 pieces?
Number of plates = ………………………… = ……… plates

(5) Ahmed divided L.E. 45 among his 5 sons. How much money does each son get?
Each son gets = ………………………… = L.E. ………

Complete using one of the signs (< , > or =):

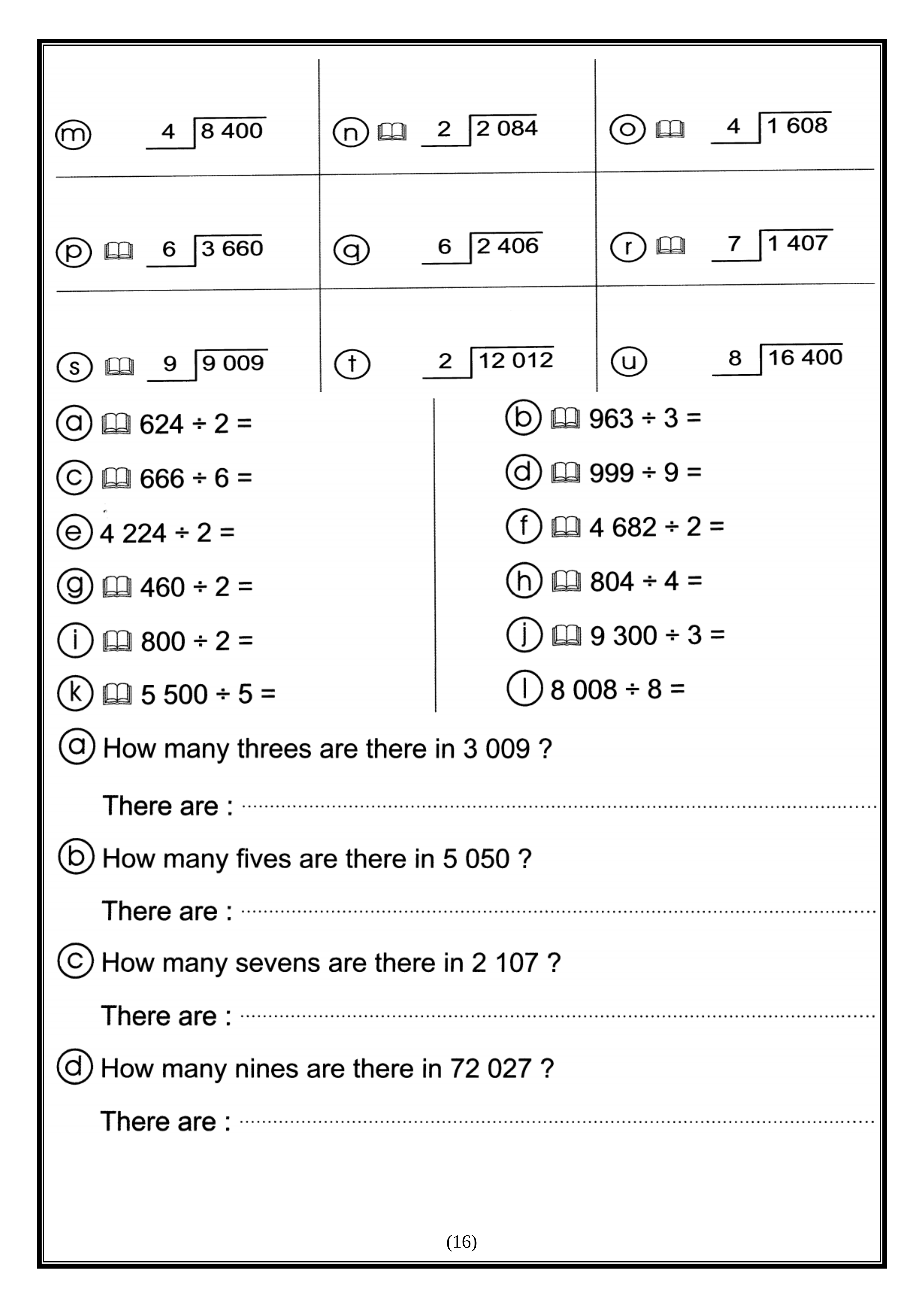
(1) $63 \div 7$ ☐ 3×3

(2) $24 \div 4$ ☐ $6 + 7$

(3) $12 \div 3$ ☐ 2×2

(4) 3×2 ☐ $(36 \div 9) + 1$

(a) $2\overline{)48}$	(b) $3\overline{)63}$	(c) $5\overline{)40}$
(d) $2\overline{)428}$	(e) $4\overline{)484}$	(f) $2\overline{)624}$
(g) $3\overline{)936}$	(h) $5\overline{)500}$	(i) $6\overline{)186}$
(j) $5\overline{)525}$	(k) $4\overline{)248}$	(l) $7\overline{)4\ 270}$



(m) 4 ⟌ 8 400	(n) 2 ⟌ 2 084	(o) 4 ⟌ 1 608
(p) 6 ⟌ 3 660	(q) 6 ⟌ 2 406	(r) 7 ⟌ 1 407
(s) 9 ⟌ 9 009	(t) 2 ⟌ 12 012	(u) 8 ⟌ 16 400

(a) 624 ÷ 2 =

(b) 963 ÷ 3 =

(c) 666 ÷ 6 =

(d) 999 ÷ 9 =

(e) 4 224 ÷ 2 =

(f) 4 682 ÷ 2 =

(g) 460 ÷ 2 =

(h) 804 ÷ 4 =

(i) 800 ÷ 2 =

(j) 9 300 ÷ 3 =

(k) 5 500 ÷ 5 =

(l) 8 008 ÷ 8 =

(a) How many threes are there in 3 009 ?

There are : ....

(b) How many fives are there in 5 050 ?

There are : ....

(c) How many sevens are there in 2 107 ?

There are : ....

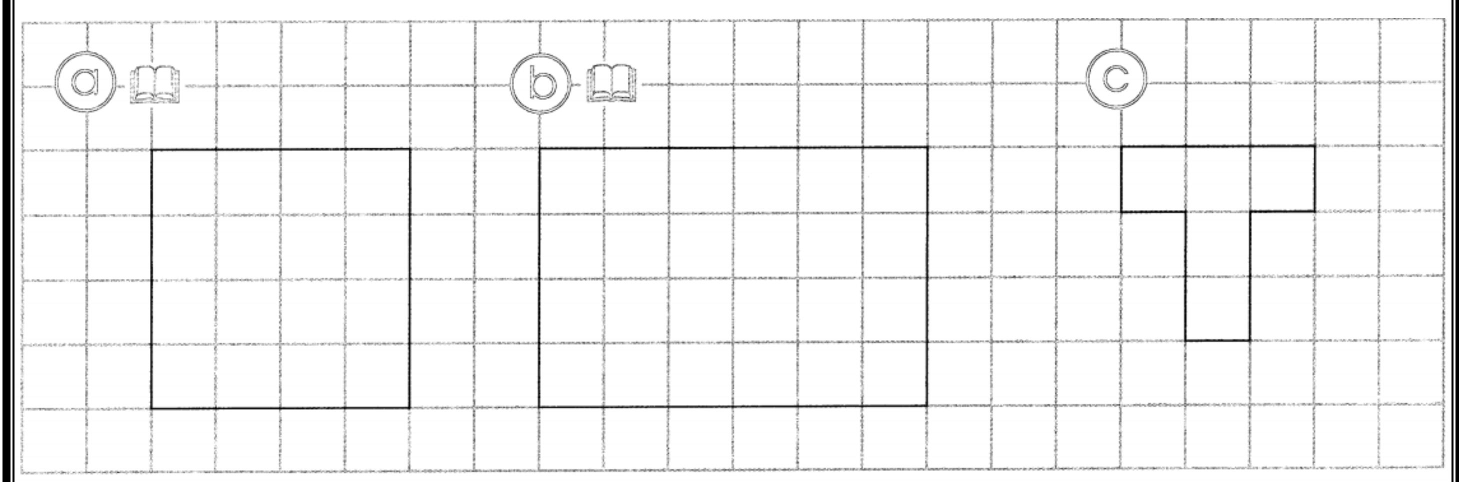
(d) How many nines are there in 72 027 ?

There are : ....

The perimeter

The perimeter of any polygon equals the sum of its sides' length

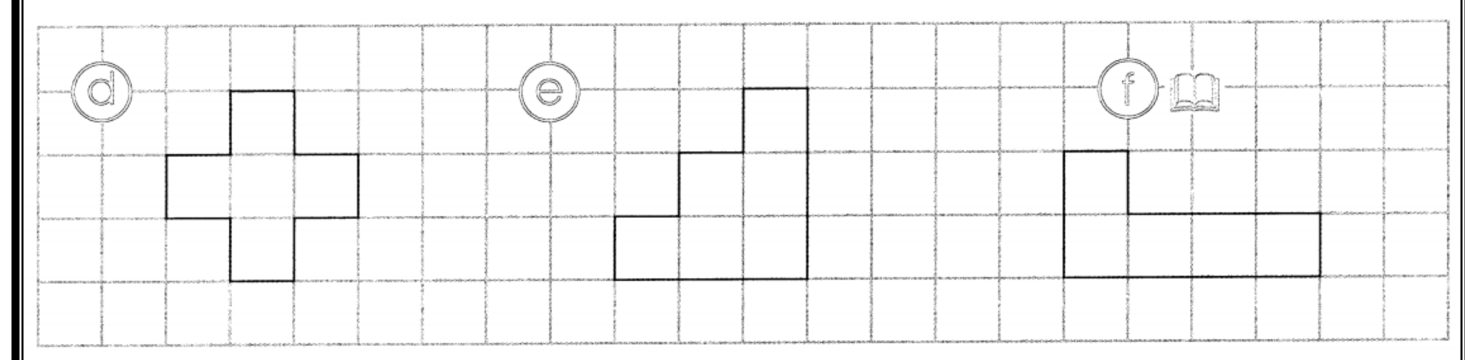
[1] Find the perimeter of each of the following figures:



The perimeter = units.

The perimeter = units.

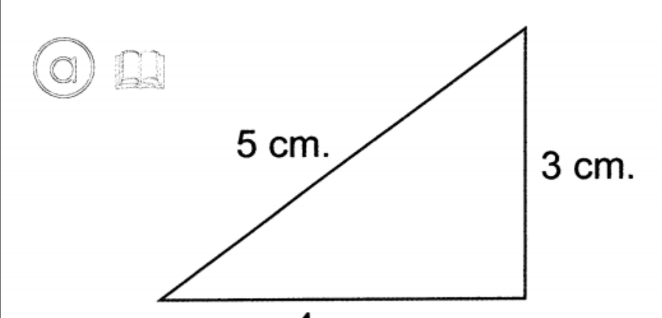
The perimeter = units.



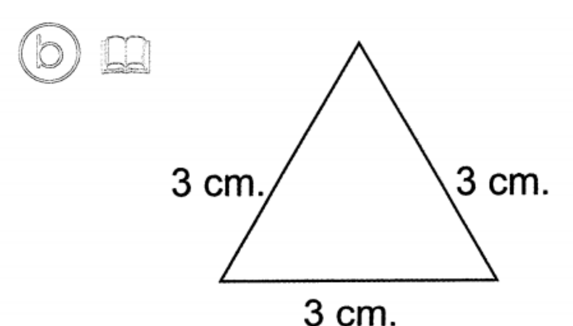
The perimeter = units.

The perimeter = units.

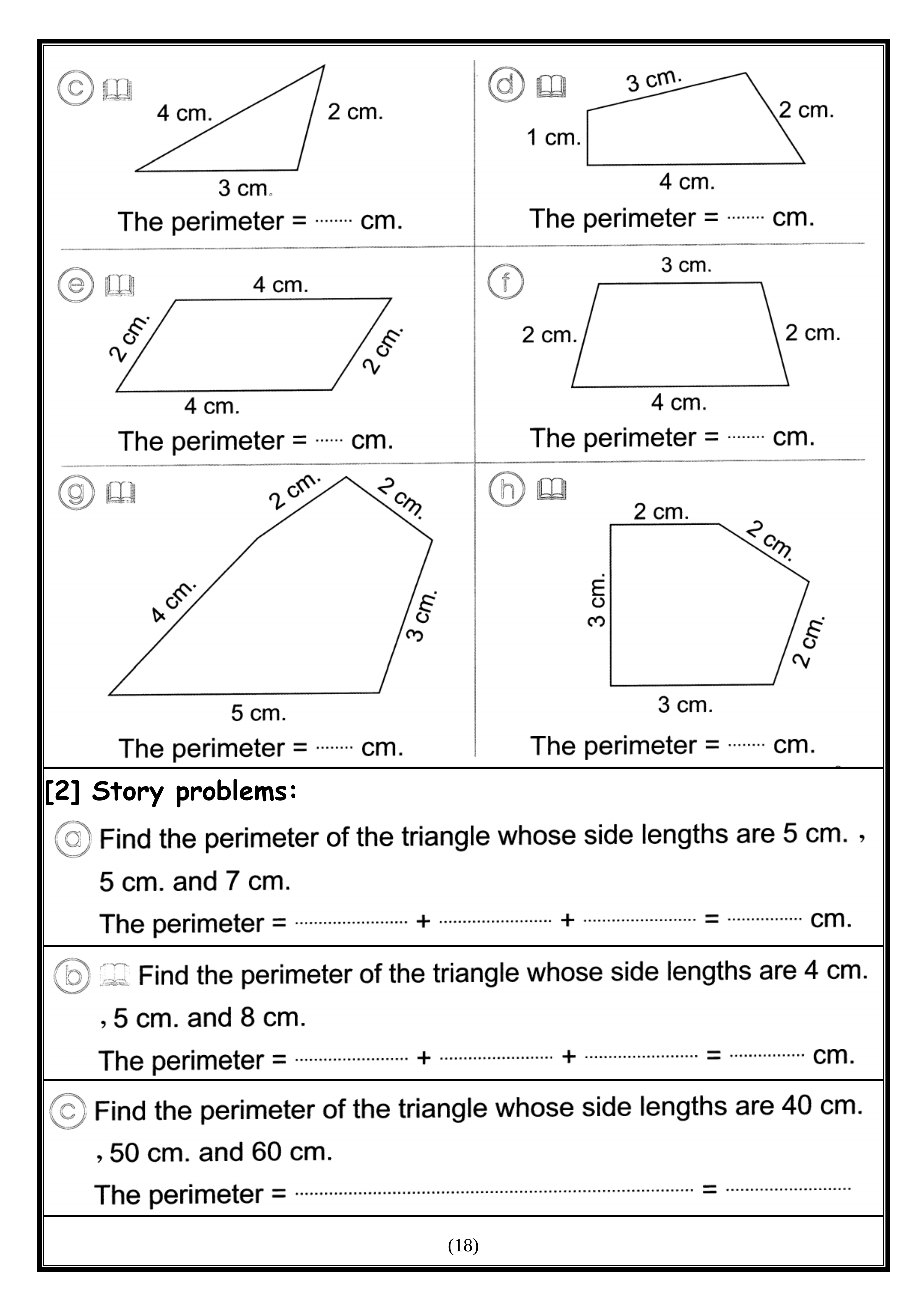
The perimeter = units.



The perimeter = ········ cm.



The perimeter = ········ cm.



ⓒ
4 cm.
2 cm.
3 cm.
The perimeter = ... cm.

ⓓ
3 cm.
2 cm.
1 cm.
4 cm.
The perimeter = ... cm.

ⓔ
4 cm.
2 cm.
2 cm.
4 cm.
The perimeter = ... cm.

ⓕ
3 cm.
2 cm.
2 cm.
4 cm.
The perimeter = ... cm.

ⓖ
2 cm.
2 cm.
4 cm.
3 cm.
5 cm.
The perimeter = ... cm.

ⓗ
2 cm.
2 cm.
3 cm.
2 cm.
3 cm.
The perimeter = ... cm.

[2] Story problems:

ⓐ Find the perimeter of the triangle whose side lengths are 5 cm. , 5 cm. and 7 cm.

The perimeter = ... + ... + ... = ... cm.

ⓑ Find the perimeter of the triangle whose side lengths are 4 cm. , 5 cm. and 8 cm.

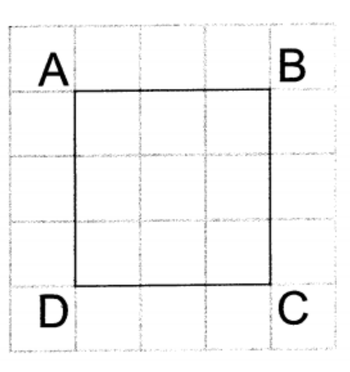
The perimeter = ... + ... + ... = ... cm.

ⓒ Find the perimeter of the triangle whose side lengths are 40 cm. , 50 cm. and 60 cm.

The perimeter = ... = ...

[3] Complete:

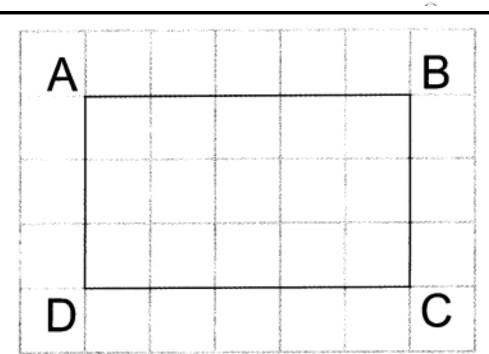
ⓐ In the square ABCD :



- AB = 3 units
- BC = ... units
- CD = ... units
- DA = ... units
- The perimeter of the square = ... + ... + ... + ...

  = ... × 4 = ... units

ⓑ In the rectangle ABCD :

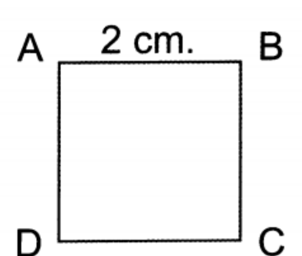


- AB = 5 units
- BC = 3 units
- CD = ... units
- DA = ... units
- The perimeter of the rectangle = ... + ... + ... + ...

  = (5 + 3) × 2 = ... × 2 = ... units

[4] Complete:

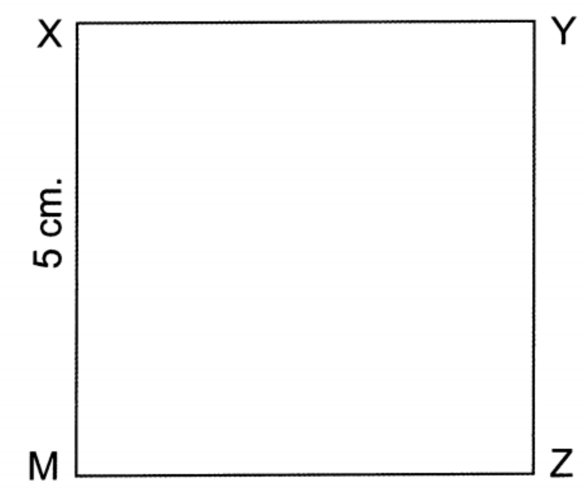
ⓐ ABCD is a square.



- The perimeter of the square

  = ... × 4 = ... cm.

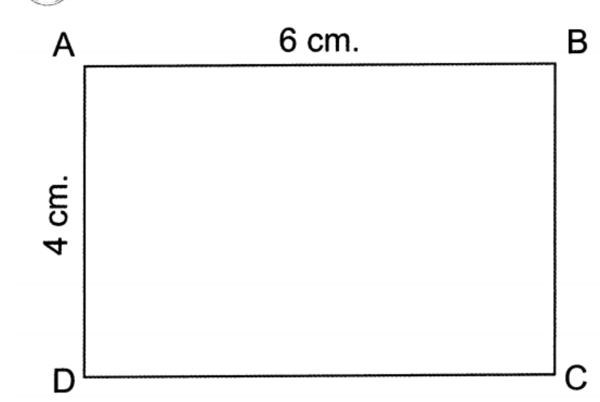
ⓑ XYZM is a square.



- The perimeter of the square

  = ... × 4 = ... cm.

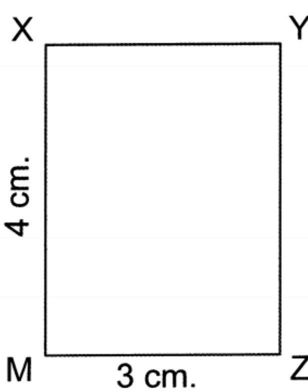
(c) ABCD is a rectangle.



• The perimeter of the rectangle

= (...... + ...) × 2 = ... × 2 = ... cm.

(d) XYZM is a rectangle.



• The perimeter of the rectangle

= (...... + ...) × 2 = ... × 2 = ... cm.

[5] Complete:

(a) **In the opposite figure :**

BCDE is a square where AB = 3 cm.

, AE = 5 cm. and CD = 4 cm.

Calculate :

(1) The perimeter of the square BCDE

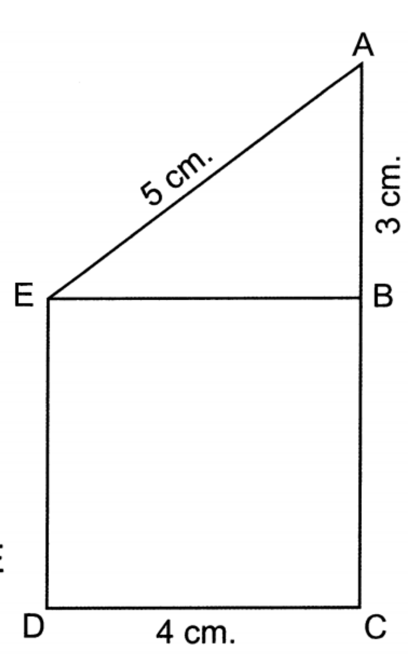
= .... = ... cm.

(2) The perimeter of the triangle ABE

= .... = ... cm.

(3) The perimeter of the whole shape ACDE

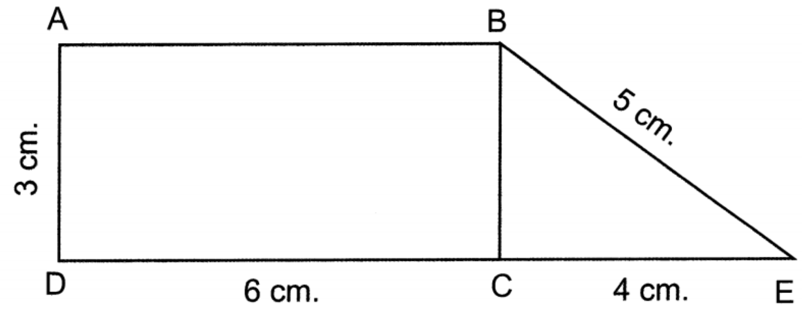
= .... = ... cm.



(b) **In the following figure :**

ABCD is a rectangle where AD = 3 cm.

, DC = 6 cm. , CE = 4 cm. and EB = 5 cm.



Calculate :

(1) The perimeter of the rectangle ABCD = ... cm.

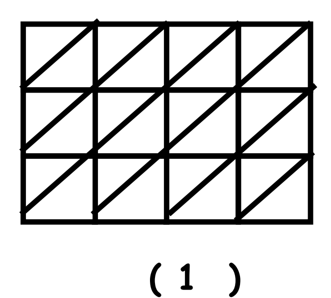
(2) The perimeter of the triangle BCE = ... cm.

(3) The perimeter of the shape ABED = ... cm.

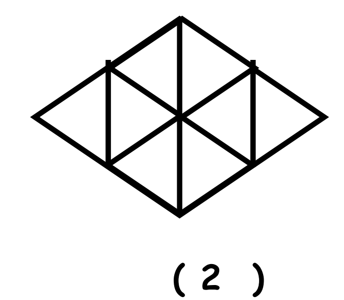
The area

The area of a geometric figure is the number of equal parts forming a region

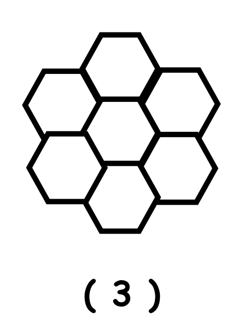
Find the area of each of the following figures:



(1)



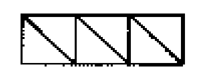
(2)



(3)

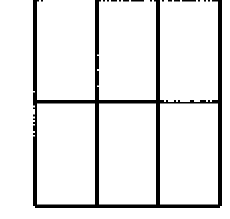
Figure	The area
Figure (1)	……… ………
Figure (2)	……… ………
Figure (3)	………

[a]



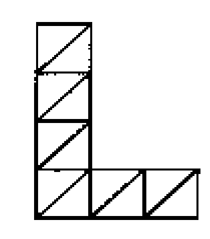
The area = ………

[b]



The area = ………

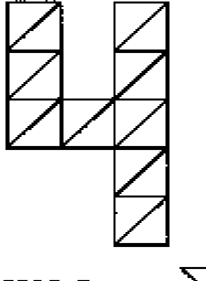
[c]



The area = ………

= ………

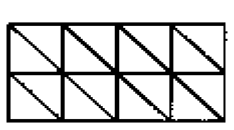
[d]



The area = ………

= ………

[e]

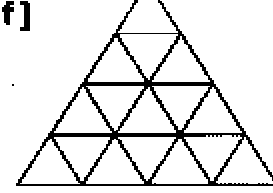


The area = ………

= ………

= ………

[f]

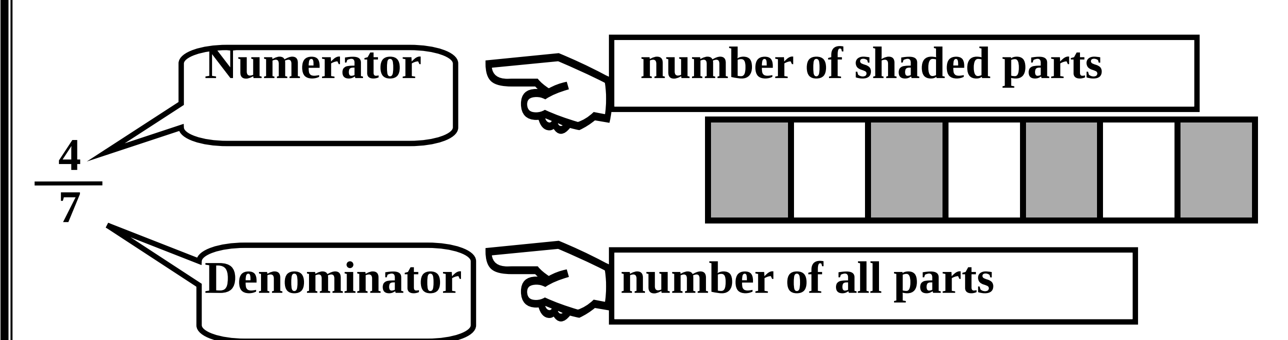


The area = ………

= ………

With My Best Wishes

Fractions



$\frac{1}{2}$	One half
$\frac{2}{3}$	Two thirds
$\frac{3}{4}$	Three quarters
$\frac{2}{5}$	Two fifths
$\frac{1}{6}$	One sixth
$\frac{2}{7}$	Two sevenths
$\frac{3}{8}$	Three eighths
$\frac{4}{9}$	Four ninths
$\frac{7}{10}$	Seven tenths

[1] Complete:

(a) $\frac{1}{3}$ numerator is .... and denominator is ....

(b) $\frac{3}{4}$ numerator is .... and denominator is ....

(c) $\frac{5}{6}$ numerator is .... and denominator is ....

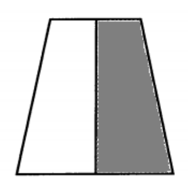
(d) $\frac{4}{9}$ numerator is .... and denominator is ....

(e) $\frac{2}{11}$ numerator is .... and denominator is ....

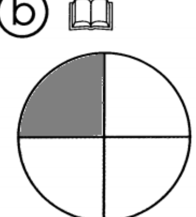


[2] Write the fraction which represents the shaded part:

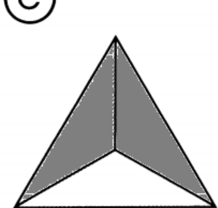






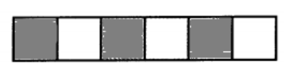


(c)

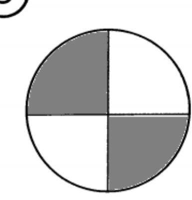




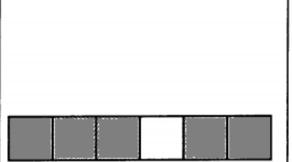




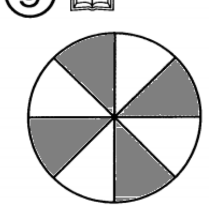
(e)



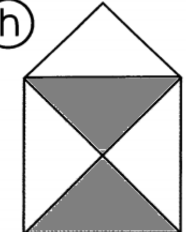
(f)



(g)



(h)



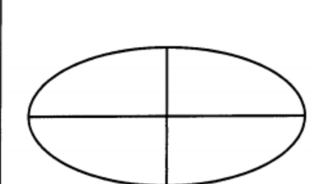
[3] Shade according to the fraction:



$\frac{2}{3}$

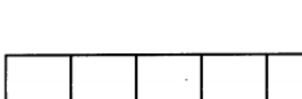






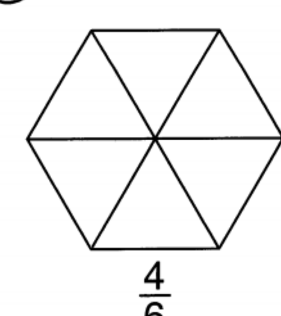
$\frac{3}{4}$





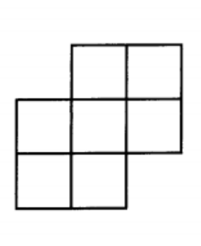
$\frac{3}{5}$





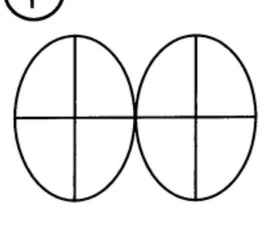
$\frac{4}{6}$

(e)



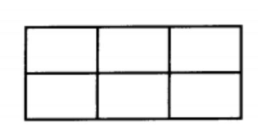
$\frac{3}{7}$





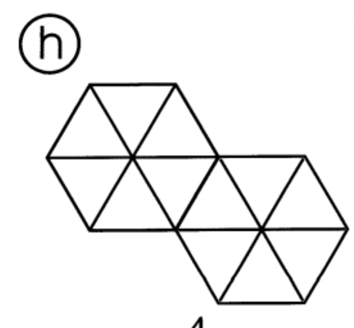
$\frac{5}{8}$

(g)



$\frac{4}{6}$

(h)



$\frac{4}{12}$

[4] Write the fraction:

Half = ……
Quarter = ……
third = ……

One fifth = ……
two sixths = ……
three eighths = ……

Five ninths = ……
Four sevenths = ……
one tenth = ……

[5] Write each fraction in words:

$\frac{2}{3}$ = ...

$\frac{3}{4}$ = ...

$\frac{5}{7}$ = ...

$\frac{5}{8}$ = ...

[6] How many?

ⓐ 🕮 How many halves in the whole one ? ....

ⓑ 🕮 How many thirds in the whole one ? ....

ⓒ 🕮 How many quarters (fourths) in the whole one ? ....

ⓓ 🕮 How many fifths in the whole one ? ....

ⓔ How many ninths in the whole one ? ....

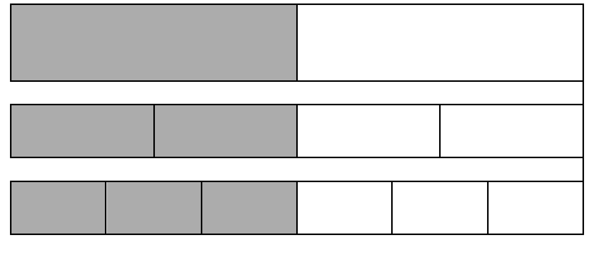
ⓕ How many elevenths in the whole one ? ....

Equal Fractions

$\frac{1}{2}$ One half

$\frac{2}{4}$ Two quarters

$\frac{3}{6}$ Three sixths



$\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$

[1] Complete:

ⓐ $\frac{1}{2} = \frac{\dots\dots}{6}$

ⓑ $\frac{2}{3} = \frac{\dots\dots}{12}$

ⓒ $\frac{3}{5} = \frac{\dots\dots}{10}$

ⓓ $\frac{2}{9} = \frac{\dots\dots}{18}$

ⓔ $\frac{5}{8} = \frac{20}{\dots\dots}$

ⓕ $\frac{2}{7} = \frac{12}{\dots\dots}$

ⓖ $\frac{3}{4} = \frac{\dots\dots}{20}$

ⓗ $\frac{5}{6} = \frac{30}{\dots\dots}$

ⓘ $\frac{3}{9} = \frac{\dots\dots}{27}$

ⓙ $\frac{2}{4} = \frac{10}{\dots\dots}$

ⓚ $\frac{4}{6} = \frac{16}{\dots\dots}$

ⓛ $\frac{3}{3} = \frac{\dots\dots}{7}$

[2] Complete:

ⓐ $\frac{1}{2} = \frac{\dots\dots}{8} = \frac{6}{\dots\dots}$

ⓑ $\frac{1}{3} = \frac{\dots\dots}{6} = \frac{5}{\dots\dots}$

ⓒ $\frac{2}{5} = \frac{\dots\dots}{15} = \frac{8}{\dots\dots}$

ⓓ $\frac{3}{7} = \frac{9}{\dots\dots} = \frac{\dots\dots}{35}$

[3] Complete:

ⓐ $\frac{1}{5} = \frac{\dots\dots}{\dots\dots}$

ⓑ $\frac{1}{9} = \frac{\dots\dots}{\dots\dots}$

ⓒ $\frac{3}{4} = \frac{\dots\dots}{\dots\dots}$

ⓓ $\frac{2}{7} = \frac{\dots\dots}{\dots\dots}$

ⓔ $\frac{5}{8} = \frac{\dots\dots}{\dots\dots}$

ⓕ $\frac{4}{9} = \frac{\dots\dots}{\dots\dots}$

ⓖ $\frac{6}{7} = \frac{\dots\dots}{\dots\dots}$

ⓗ $\frac{3}{8} = \frac{\dots\dots}{\dots\dots}$

ⓘ $\frac{3}{10} = \frac{\dots\dots}{\dots\dots}$

ⓙ $\frac{6}{11} = \frac{\dots\dots}{\dots\dots}$

ⓚ $\frac{7}{12} = \frac{\dots\dots}{\dots\dots}$

ⓛ $\frac{9}{11} = \frac{\dots\dots}{\dots\dots}$

[4] Choose the correct answer:

ⓐ $\frac{4}{5} = \frac{\dots\dots}{10}$ (4 ***or*** 6 ***or*** 8)

ⓑ $\frac{2}{7} = \frac{18}{\dots\dots}$ (9 ***or*** 14 ***or*** 63)

ⓒ $\frac{\dots\dots}{24} = \frac{3}{8}$ (6 ***or*** 9 ***or*** 12)

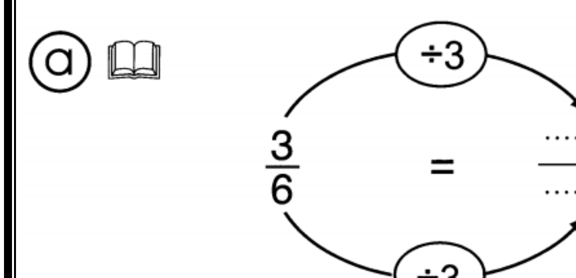
ⓓ $\frac{8}{\dots\dots} = \frac{2}{9}$ (4 ***or*** 15 ***or*** 36)

ⓔ $\frac{2}{3} = \frac{\dots\dots}{\dots\dots}$ ($\frac{6}{9}$ ***or*** $\frac{9}{11}$ ***or*** $\frac{9}{15}$)

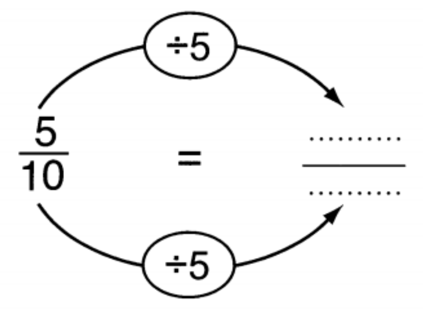
ⓕ $\frac{1}{2} = \frac{\dots\dots}{\dots\dots}$ ($\frac{3}{6}$ ***or*** $\frac{3}{9}$ ***or*** $\frac{3}{12}$)

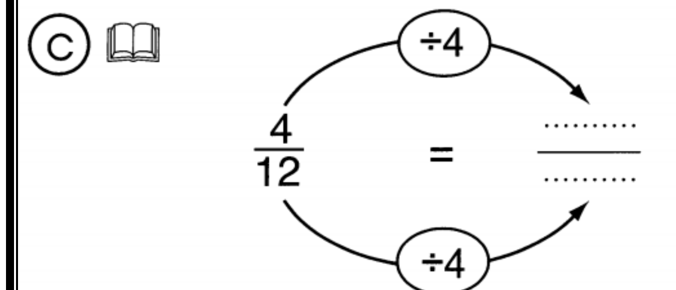
ⓖ $\frac{1}{3} = \frac{\dots\dots}{\dots\dots}$ ($\frac{7}{10}$ ***or*** $\frac{9}{10}$ ***or*** $\frac{5}{15}$)

[5] Complete:

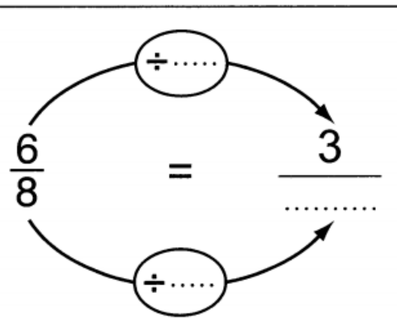












[6] Complete:

ⓐ $\frac{5}{10} = \frac{\dots\dots}{2}$

ⓑ $\frac{6}{8} = \frac{\dots\dots}{4}$

ⓒ 📖 $\frac{15}{25} = \frac{\dots\dots}{5}$

ⓓ $\frac{16}{20} = \frac{\dots\dots}{10}$

ⓔ 📖 $\frac{9}{27} = \frac{1}{\dots\dots}$

ⓕ 📖 $\frac{7}{70} = \frac{1}{\dots\dots}$

ⓖ $\frac{18}{27} = \frac{2}{\dots\dots}$

ⓗ $\frac{30}{36} = \frac{5}{\dots\dots}$

ⓘ 📖 $\frac{12}{18} = \frac{2}{\dots\dots}$

ⓙ $\frac{24}{48} = \frac{6}{\dots\dots} = \frac{\dots\dots}{2}$

ⓚ $\frac{4}{10} = \frac{2}{\dots\dots} = \frac{\dots\dots}{15}$

ⓛ $\frac{2}{\dots\dots} = \frac{10}{15} = \frac{6}{\dots\dots}$

Simplifying fractions

[1] Simplify:

(a) 📖 $\frac{4}{12} = \frac{\dots\dots}{\dots\dots}$

(b) $\frac{6}{10} = \frac{\dots\dots}{\dots\dots}$

(c) 📖 $\frac{3}{30} = \frac{\dots\dots}{\dots\dots}$

(d) $\frac{12}{14} = \frac{\dots\dots}{\dots\dots}$

(e) 📖 $\frac{6}{21} = \frac{\dots\dots}{\dots\dots}$

(f) $\frac{10}{100} = \frac{\dots\dots}{\dots\dots}$

(g) $\frac{18}{30} = \frac{\dots\dots}{\dots\dots}$

(h) $\frac{16}{20} = \frac{\dots\dots}{\dots\dots}$

(i) 📖 $\frac{35}{45} = \frac{\dots\dots}{\dots\dots}$

(j) $\frac{28}{49} = \frac{\dots\dots}{\dots\dots}$

(k) $\frac{21}{27} = \frac{\dots\dots}{\dots\dots}$

(l) $\frac{8}{44} = \frac{\dots\dots}{\dots\dots}$

(m) $\frac{36}{66} = \frac{\dots\dots}{\dots\dots}$

(n) $\frac{100}{180} = \frac{\dots\dots}{\dots\dots}$

(o) $\frac{120}{180} = \frac{\dots\dots}{\dots\dots}$

[2] Complete using (<), (=) or (>):

(a) $\frac{1}{5}$ .... $\frac{2}{5}$

(b) $\frac{3}{6}$ .... $\frac{5}{6}$

(c) 📖 $\frac{3}{4}$ .... $\frac{1}{4}$

(d) $\frac{7}{8}$ .... $\frac{5}{8}$

(e) $\frac{3}{10}$ .... $\frac{1}{10}$

(f) $\frac{7}{12}$ .... $\frac{11}{12}$

(g) 📖 $\frac{9}{11}$ .... $\frac{7}{11}$

(h) $\frac{7}{7}$ .... $\frac{6}{7}$

(i) $\frac{3}{8}$ .... $\frac{2}{8}$

(j) $\frac{1}{6}$ .... $\frac{1}{3}$

(k) $\frac{1}{2}$ .... $\frac{1}{4}$

(l) $\frac{4}{5}$ .... $\frac{4}{4}$

(m) $\frac{1}{2}$ .... $\frac{1}{3}$

(n) $\frac{1}{2}$ .... $\frac{7}{10}$

(o) $\frac{1}{3}$ .... $\frac{4}{6}$

(p) 📖 $\frac{3}{3}$ 1

(q) 📖 $\frac{4}{5}$ 1

(r) $\frac{2}{5}$ .... $\frac{3}{3}$

(s) 📖 1 .... $\frac{6}{6}$

(t) $\frac{5}{5}$ .... $\frac{2}{2}$

(u) $\frac{5}{7}$ .... $\frac{15}{21}$

[3] Circle the greatest fraction:

ⓐ $\frac{2}{6}$, $\frac{5}{6}$, $\frac{4}{6}$, $\frac{3}{6}$

ⓑ $\frac{5}{7}$, $\frac{2}{7}$, $\frac{6}{7}$, $\frac{3}{7}$

ⓒ $\frac{2}{9}$, $\frac{7}{9}$, $\frac{4}{9}$, $\frac{9}{9}$

ⓓ $\frac{5}{11}$, $\frac{2}{11}$, $\frac{7}{11}$, $\frac{4}{11}$

ⓔ $\frac{1}{6}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$

ⓕ $\frac{4}{5}$, $\frac{2}{5}$, $\frac{1}{5}$, $\frac{6}{10}$

ⓖ $\frac{3}{8}$, $\frac{1}{4}$, $\frac{7}{8}$, $\frac{4}{8}$

ⓗ $\frac{2}{7}$, $\frac{3}{7}$, $\frac{1}{7}$, 1

ⓘ $\frac{1}{6}$, $\frac{1}{5}$, $\frac{1}{7}$, 1

ⓙ $\frac{2}{5}$, $\frac{2}{3}$, $\frac{2}{7}$, $\frac{2}{9}$

[4] Arrange in an ascending order

ⓐ 📖 $\frac{4}{6}$, $\frac{1}{6}$, $\frac{2}{6}$ The order is : ……… , ……… and ………

ⓑ $\frac{9}{10}$, $\frac{3}{10}$, $\frac{5}{10}$, $\frac{2}{10}$ The order is : ……… , ……… , ……… and ………

ⓒ $\frac{22}{25}$, $\frac{18}{25}$, $\frac{12}{25}$, $\frac{24}{25}$ The order is : ……… , ……… , ……… and ………

ⓓ $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{7}$, $\frac{1}{5}$ The order is : ……… , ……… , ……… and ………

[5] Arrange in a descending order

ⓐ 📖 $\frac{1}{5}$, $\frac{3}{5}$, $\frac{5}{5}$ The order is : ……… , ……… and ………

ⓑ $\frac{5}{7}$, $\frac{7}{7}$, $\frac{6}{7}$, $\frac{2}{7}$ The order is : ……… , ……… , ……… and ………

ⓒ $\frac{5}{10}$, $\frac{7}{10}$, $\frac{3}{10}$, $\frac{9}{10}$ The order is : ……… , ……… , ……… and ………

ⓓ $\frac{1}{7}$, $\frac{1}{9}$, $\frac{1}{6}$, $\frac{1}{10}$ The order is : ……… , ……… , ……… and ………

ⓔ $\frac{1}{10}$, $\frac{1}{12}$, $\frac{1}{11}$, $\frac{1}{8}$ The order is : ……… , ……… , ……… and ………

ⓕ 📖 $\frac{2}{9}$, $\frac{7}{9}$, $\frac{5}{9}$, 1 The order is : ……… , ……… , ……… and ………

Adding and Subtracting the fractions

[1] Add:

ⓐ 📖 $\frac{3}{7} + \frac{1}{7} = \frac{\dots}{\dots}$

ⓑ $\frac{1}{5} + \frac{2}{5} = \frac{\dots}{\dots}$

ⓒ $\frac{1}{3} + \frac{1}{3} = \frac{\dots}{\dots}$

ⓓ 📖 $\frac{1}{9} + \frac{7}{9} = \frac{\dots}{\dots}$

ⓔ $\frac{3}{8} + \frac{2}{8} = \frac{\dots}{\dots}$

ⓕ 📖 $\frac{4}{6} + \frac{1}{6} = \frac{\dots}{\dots}$

ⓖ $\frac{5}{11} + \frac{4}{11} = \frac{\dots}{\dots}$

ⓗ $\frac{4}{15} + \frac{7}{15} = \frac{\dots}{\dots}$

ⓘ $\frac{2}{10} + \frac{7}{10} = \frac{\dots}{\dots}$

ⓙ $\frac{1}{8} + \frac{2}{8} + \frac{4}{8} = \frac{\dots}{\dots}$

ⓚ $\frac{4}{10} + \frac{3}{10} + \frac{2}{10} = \frac{\dots}{\dots}$

ⓛ $\frac{1}{11} + \frac{1}{11} + \frac{3}{11} = \frac{\dots}{\dots}$

[2] Add then simplify:

ⓐ $\frac{1}{8} + \frac{3}{8} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓑ $\frac{2}{9} + \frac{1}{9} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓒ 📖 $\frac{5}{12} + \frac{3}{12} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓓ $\frac{2}{15} + \frac{4}{15} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓔ $\frac{5}{18} + \frac{3}{18} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓕ $\frac{7}{20} + \frac{7}{20} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

[3] Subtract and simplify:

ⓐ 📖 $\frac{4}{5} - \frac{1}{5} = \frac{\dots}{\dots}$

ⓑ 📖 $\frac{5}{6} - \frac{4}{6} = \frac{\dots}{\dots}$

ⓒ 📖 $\frac{4}{9} - \frac{2}{9} = \frac{\dots}{\dots}$

ⓓ 📖 $\frac{3}{11} - \frac{1}{11} = \frac{\dots}{\dots}$

ⓔ 📖 $\frac{5}{8} - \frac{3}{8} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

ⓕ $\frac{8}{10} - \frac{6}{10} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$

[4] Complete:

(a) $\frac{7}{9} + \frac{\dots}{\dots} = \frac{8}{9}$

(b) $\frac{5}{12} + \frac{\dots}{\dots} = \frac{9}{12}$

(c) $\frac{3}{5} + \frac{\dots}{\dots} = 1$

(d) $\frac{\dots}{\dots} + \frac{1}{3} = \frac{2}{3}$

(e) $\frac{\dots}{\dots} + \frac{4}{9} = \frac{8}{9}$

(f) $\frac{\dots}{\dots} + \frac{5}{8} = 1$

(a) $\frac{9}{10} - \frac{\dots}{\dots} = \frac{3}{10}$

(b) $\frac{3}{5} - \frac{\dots}{\dots} = \frac{2}{5}$

(c) $\frac{4}{7} - \frac{\dots}{\dots} = \frac{1}{7}$

(d) $1 - \frac{\dots}{\dots} = \frac{3}{10}$

(e) $\frac{\dots}{\dots} - \frac{3}{4} = \frac{1}{4}$

(f) $\frac{\dots}{\dots} - \frac{1}{6} = \frac{1}{6}$

(g) $\frac{\dots}{\dots} - \frac{5}{8} = \frac{1}{4}$

[5] Story problems:

(a)

Noha divided a cake into equal 8 pieces.

She ate three pieces and her brother ate two pieces.

What is the fraction of the eaten parts ?



The eaten parts = ... = ... parts.

(b)

In the morning , Amal walks $\frac{1}{4}$ km. In the evening , she walks $\frac{3}{4}$ km. How long does she walk ?



She walks = ... = ... = ... km.

(c)

One day , $\frac{1}{8}$ of the pupils in a class were absent and $\frac{2}{8}$ of the pupils were on a trip.

What is the fraction of the pupils who were present ?

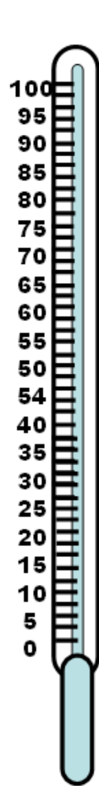
The fraction of the present pupils = ... = ...

Measuring Temperature

Thermometer is used for measuring temperature.

Degree (°): is the unit of measuring temperature.

The thermometer is marked with the **Celsius** scale (C).



- Boiling point of water (100°C)
- Hot day (40°C)
- Normal body temperature (37°C)
- Room temperature (20°C)
- Cold day (10°C)
- Freezing point of water (0°C)



[1] Complete

a) The instrument used to measure temperature is …………

b) The unit used to measure temperature is …………

c) The normal human temperature is …………

d) The external temperature at which you would not feel hot or cold is …………

e) The temperature at which water becomes ice is …………

f) The temperature at which water boils is …………

g) The benefit of the weather forecast is …………



The temperatures recorded in one of the week were as follows:

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Temp.	22°C	23°C	21°C	18°C	19°C	20°C	21°C

Answer the following questions:

a) **On what day the temperature the highest?** ………………………

b) **On what day the temperature the lowest?** ………………………

c) **Which two days have equal temperature?** ………… and …………

Measuring the length

Kilometre (km)   metre (m)   centimeter (cm)

1 kilometre = 1000 metre	1 metre = 100 cm
$\frac{1}{2}$ kilometre = 500 metre	$\frac{1}{2}$ metre = 50 cm
$\frac{1}{4}$ kilometre = 250 metre	$\frac{1}{4}$ metre = 25 cm
$\frac{3}{4}$ kilometre = 750 metre	$\frac{3}{4}$ metre = 75 cm

[1] Complete:

3 metres = …………………… cm
18 metres = …………………… cm
800 cm = …………………… m
50 000cm = …………………… m
50 cm = …………………… m

6 kilometres = …………………… m
60 kilometres = …………………… m
9000 m = ………………… km
21 000 m = ………………… km
750 m = ………………… km

3 m and 55 cm = ……….. cm
8 m and a quarter = ……….. cm
$\frac{1}{4}$ m and 30 cm = ……….. cm

8 km and 620 m = ………m
21 km and 60 m = ………m
$\frac{3}{4}$ km and 350 m = ………m

726 cm = ……… m and …… cm
8020 cm = ……… m and …… cm

8450 m = …… km and ……… m
60200 m = …… km and ……… m

[2] Choose the correct answer:

a) The length of a pen can be ……… (10 cm, 10 km, 10 m)
b) The length of a school notebook ……… (25 cm, 1 m, 1 km)
c) The height of a house can be ……… (30 m, 8 km, 200cm)
d) The height of a child ……… (140 cm, 2 m, 1 km)
e) 5 km and 20 m = ……… m (5020, 5200, 5002)
f) The distance between Cairo and Alexandria can be ……… (78 m, 200 km, 600 cm)

[3] Choose the suitable unit of length:

g) The distance between Cairo and Amman ……… (cm, m, km)
h) The length of the swimming pool ……… (cm, m, km)
i) The length of a pencil ……… (cm, m, km)

[4] Complete:

ⓐ 2 kilometres and 324 metres = ... metres.

ⓑ 9 kilometres and 640 metres = ... metres.

ⓒ 15 kilometres and 14 metres = ... metres.

ⓓ 28 kilometres and 8 metres = ... metres.

ⓔ 10 kilometres and 409 metres = ... metres.

ⓕ 7 metres and 43 centimetres = ... centimetres.

ⓖ 5 metres and 24 centimetres = ... centimetres.

ⓗ 16 metres and 5 centimetres = ... centimetres.

ⓘ 78 metres and 12 centimetres = ... centimetres.

ⓙ 50 metres and 5 centimetres = ... centimetres.

[5] Complete:



ⓐ 7 455 m. = ... km. and .... m.

ⓑ 15 140 m. = ... km. and .... m.

ⓒ 14 400 m. = ... km. and .... m.

ⓓ 19 109 m. = ... km. and .... m.

ⓔ 10 005 m. = ... km. and .... m.

ⓕ 876 cm. = ... m. and .... cm.

ⓖ 940 cm. = ... m. and .... cm.

ⓗ 503 cm. = ... m. and .... cm.

ⓘ 16 015 cm. = ... m. and .... cm.

ⓙ 1 760 cm. = ... m. and .... cm.

Measuring weights

1 kilogram (kg) = 1000 gram (gm)

[1] Complete:

3 kg = ………………. gm

7 kg = ………………. gm

6 000 gm = …………….. kg

24 000 gm = …………….. kg

$\frac{1}{2}$ kg = ………………. gm

$\frac{3}{4}$ kg = ………………. gm

250 gm = …………….. kg

3 kg and 450 gm = …………. gm

12 kg and 350 gm = …………. gm

6 850 gm = ……… kg ……… gm

6 020 gm = ……… kg ……… gm

3 $\frac{1}{2}$ kg = ………………. gm

7 $\frac{3}{4}$ kg = ………………. gm

6 500 gm = …………….. kg

5 kg = ……………………… gm

12 kg = ……………………… gm

4 000 gm = ………………… kg

12 000 gm = ………………… kg

$\frac{1}{4}$ kg = …………………… gm

500 gm = ………………… kg

750 gm = ………………… kg

3 kg and 200 gm = …………. gm

10 kg and 50 gm = …………. gm

19 550 gm = ……… kg ……… gm

12 320 gm = ……… kg ……… gm

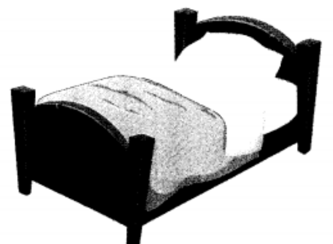
5 $\frac{1}{4}$ kg = ……………………… gm

12 $\frac{1}{2}$ kg = ……………………… gm

12 250 gm = ………………… kg

[2] Circle the suitable weight:





41 kilograms   4 kilograms





40 kilograms   40 grams





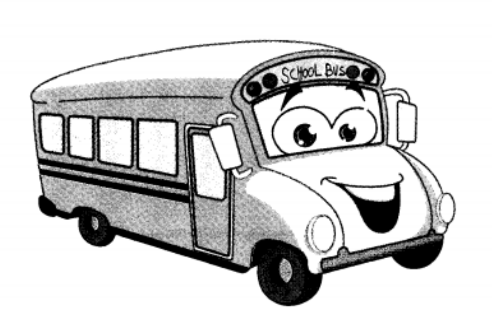
6 kilograms   6 grams

(d)



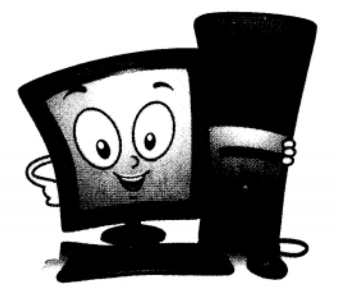
1 gram   155 grams





1 127 grams   1 127 kilograms

(f)



10 kilograms   10 grams

[3] Choose the suitable weight:

(a) The weight of a loaf of bread .... (150 gm. ***or*** $\frac{1}{2}$ kg.)

(b) The weight of an elephant .... (10 000 gm. ***or*** 300 kg.)

(c) The weight of jewelry .... (20 gm. ***or*** 10 kg.)

(d) The weight of meat .... (20 gm. ***or*** 2 kg.)

(e) The weight of 20 olives .... (400 gm. ***or*** 7 kg.)

[4] Complete:



ⓐ 4 kg. and 700 gm. = ... gm.

ⓑ 📖 3 kg. and 30 gm. = ... gm.

ⓒ 10 kg. and 800 gm. = ... gm.

ⓓ 64 kg. and 32 gm. = ... gm.

ⓔ 53 kg. and 8 gm. = ... gm.

ⓕ 📖 4 500 gm. = ... kg. and .... gm.

ⓖ 3 715 gm. = ... kg. and .... gm.

ⓗ 3 508 gm. = ... kg. and .... gm.

ⓘ 7 009 gm. = ... kg. and .... gm.

ⓙ 6 100 gm. = ... kg. and .... gm.

Measuring time

minute	دقيقة	hour	ساعة
day	يوم	week	اسبوع
month	شهر	year	سنة

1 day = 24 hours , 1 hour = 60 minutes

$\frac{1}{2}$ day = 12 hours , $\frac{1}{2}$ hour = 30 minutes

$\frac{1}{3}$ day = 8 hours , $\frac{1}{3}$ hour = 20 minutes

$\frac{1}{4}$ day = 6 hours , $\frac{1}{4}$ hour = 15 minutes

Days of the week

السبت الأحد الإثنين الثلاثاء الأربعاء الخميس الجمعة

Saturday , Sunday , Monday , Tuesday , Wednesday , Thursday , Friday

1 week = 7 days

Months of the year

1st	**January**	**31**	يناير	7th	**July**	**31**	يوليو
2nd	**February**	**28-29**	فبراير	8th	**August**	**31**	أغسطس
3rd	**March**	**31**	مارس	9th	**September**	**30**	سبتمبر
4th	**April**	**30**	إبريل	10th	**October**	**31**	أكتوبر
5th	**May**	**31**	مايو	11th	**November**	**30**	نوفمبر
6th	**June**	**30**	يونيو	12th	**December**	**31**	ديسمبر

1 year = 12 months

$\frac{1}{2}$ year = 6 months

$\frac{1}{4}$ year = 3 months

$\frac{1}{3}$ year = 4 months

[1] Complete:

A week = ... days

3 weeks..... = ... days

1 year = ... months

2 years = ... months

14 days = ... weeks

35 days = ... weeks

24 months = ... years

12 months = ... years

9 days = ... week and .... days

25 days = ... weeks and .... days

18 months = ... year and .... months

15 months = ... year and .... months

150 minutes = ... hours and .... minutes

105 minutes = ... hour and .... minutes

2 weeks and 6 days = ... + ... = ... days

3 weeks and 6 days = ... + ... = ... days

2 years and a half = ... + ... = ... months

1 year and a quarter = ... + ... = ... months

2 years and 4 months =......... + ... = ... months

An hour and a half = ... + ... = ... minutes

An hour and a quarter = ... + ... = ... minutes

An hour and 25 minutes = ... + ... = ... minutes

3 $\frac{1}{2}$ years = ... + ... = ... months

1 $\frac{1}{4}$ year = ...+ .... = ... months

2 $\frac{1}{2}$ hour = ... + ... = ... minutes

1 $\frac{1}{4}$ hour = ... + ... = ... minutes

2 $\frac{3}{4}$ hours = ... + ... = ... minutes

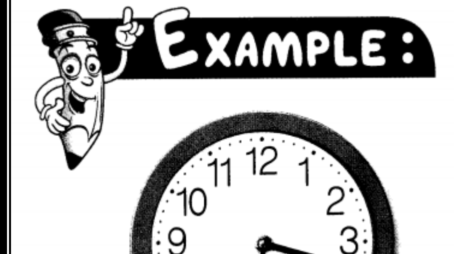
Answer the following questions:

1. How many hours in 2 days? ....
2. How many minutes in 10 hours? ....
3. How many minutes in half an hour? ....
4. How many hours in 10 days? ....
5. How many minutes in 2 hours and half?...

Answer the following questions:

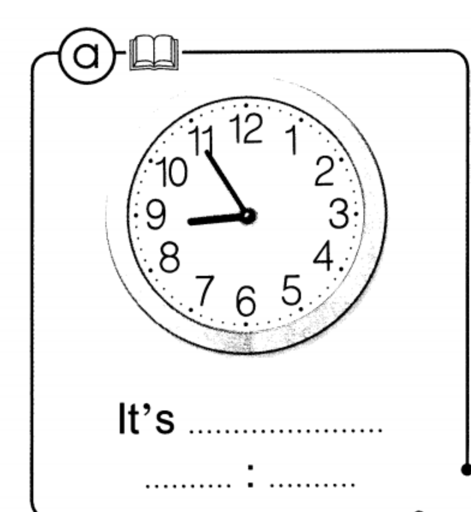
1. An hour and a half = ... + ... = ... minutes
2. An hour and a quarter = ... + ... = ... minutes
3. An hour and 25 minutes = ... + ... = ... minutes
4. 30 hours = one day and .... hours.
5. 50 hours = ... days and .... hours.
6. 150 minutes = ... hours and .... minutes.

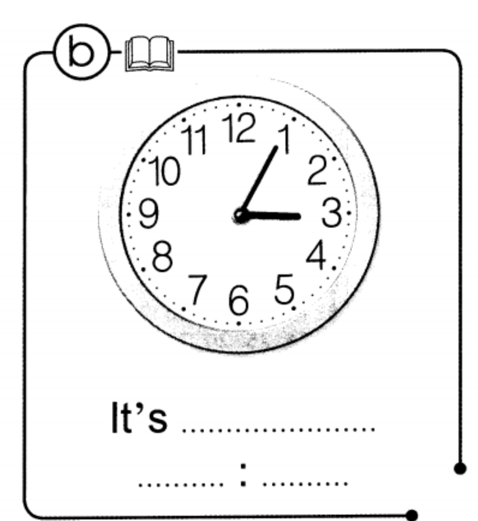
Write the time:

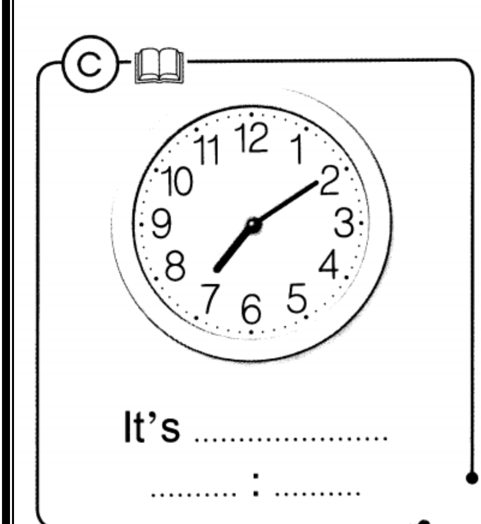


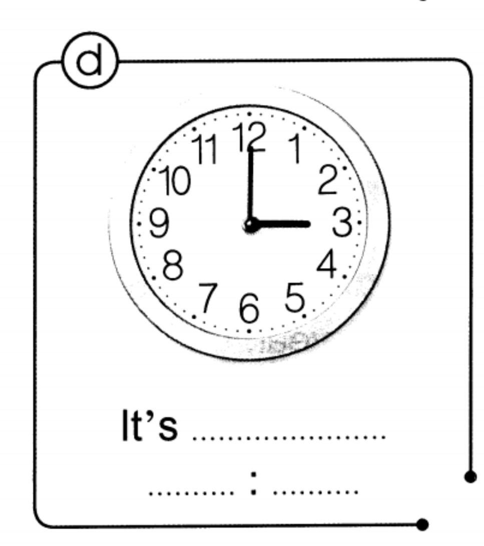
It's half past three

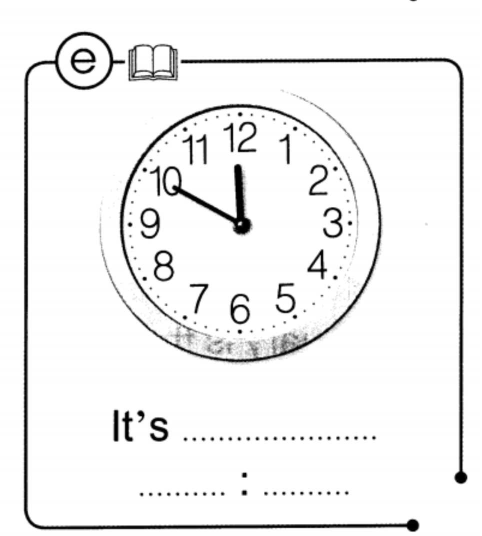
3 : 30

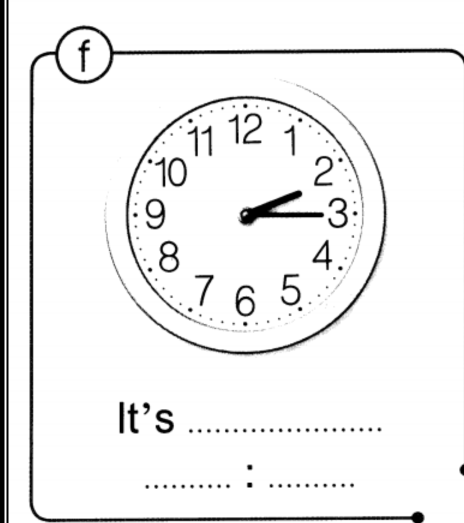


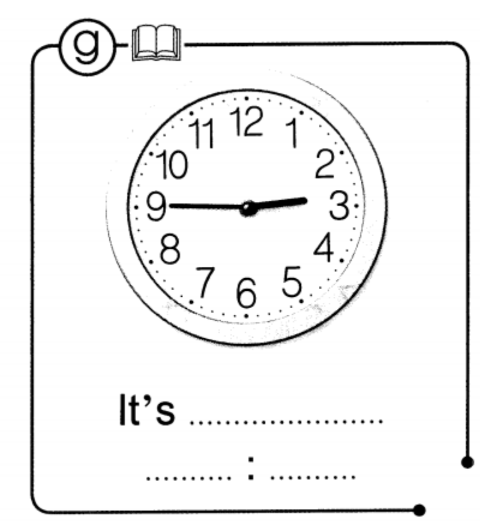


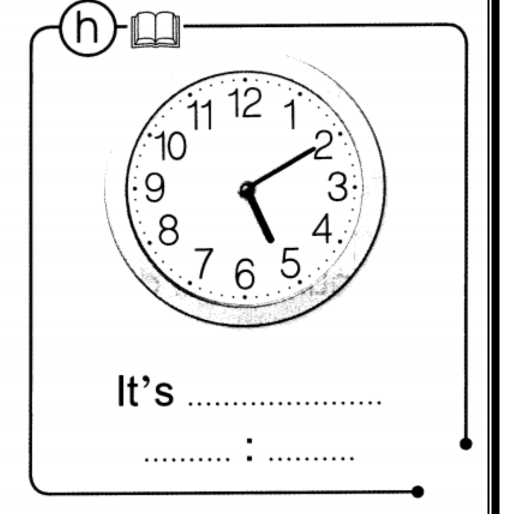


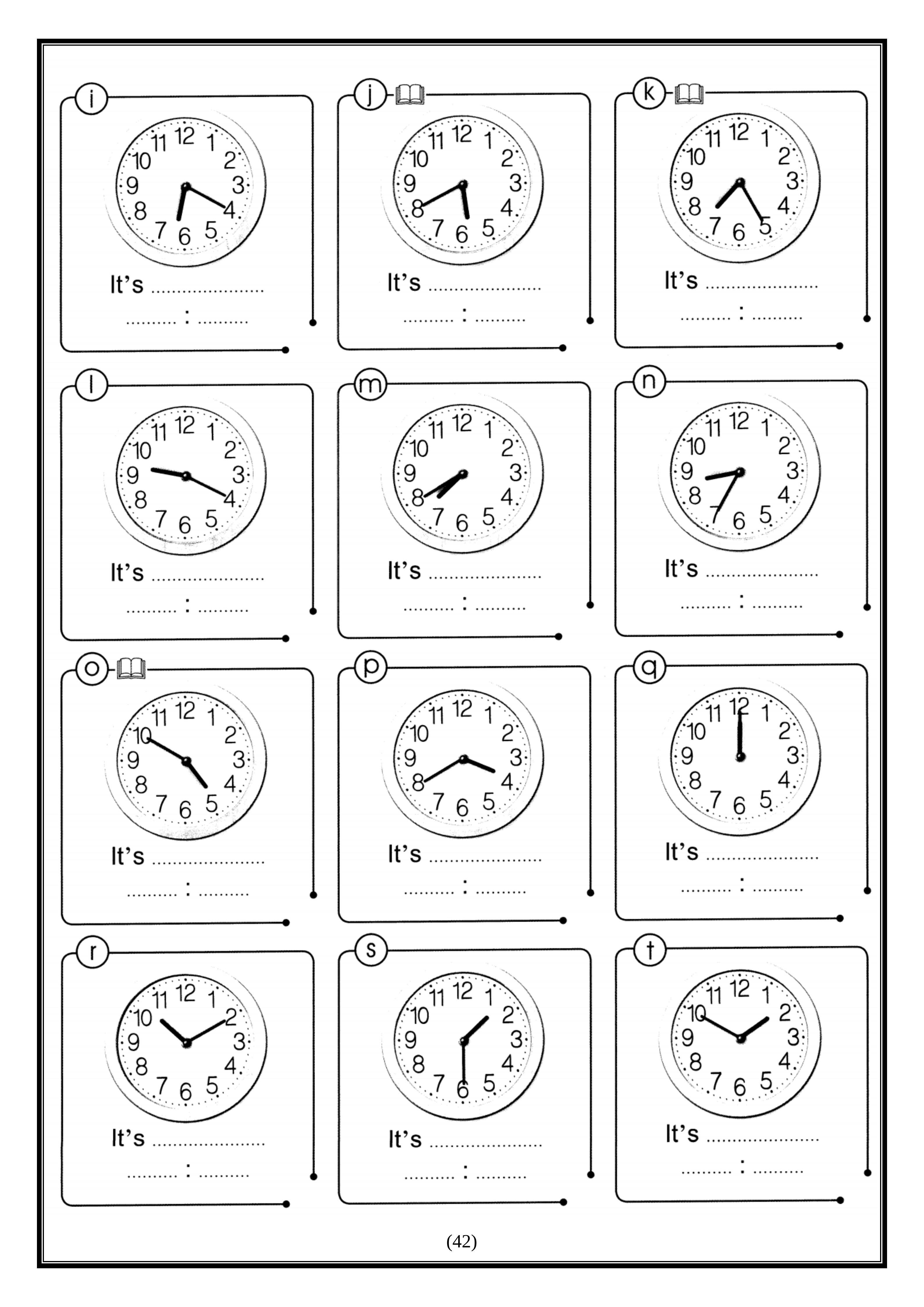






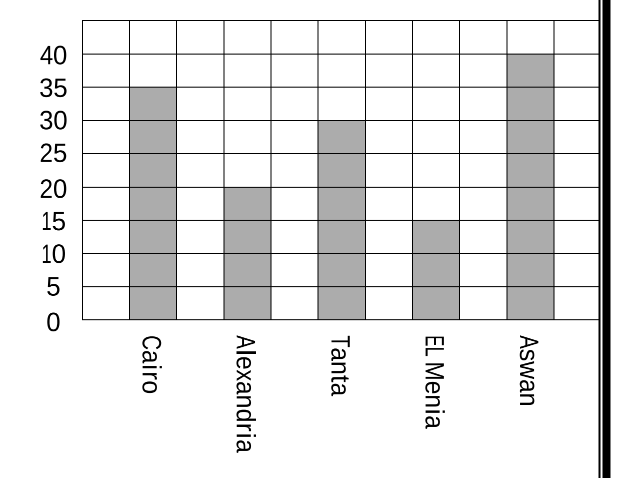





i
It's ....
.... : ....
j
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k
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l
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m
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REPRESENTING DATA

(1) Use the opposite bar-lines to complete the table:



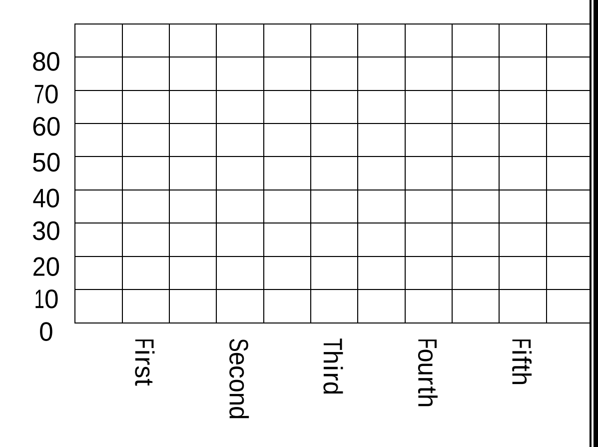
City	Cairo	Alex.	Tanta	El Menia	Aswan
Temp.	…………	…………	…………	…………	…………

The highest temperature was in ………………

The lowest temperature was in …………………

The difference between the highest and the lowest temperature was ……………………………………

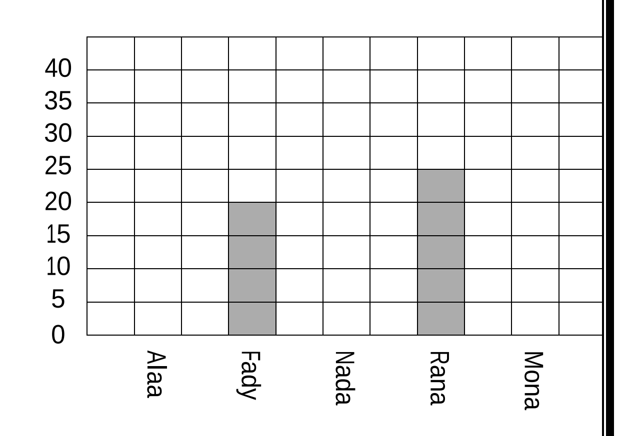
(2) The following table shows the heights of five towers:



The tower	1st	2nd	3rd	4th	5th
The height	40	10	50	20	30

Represent these data by bar-lines

(3) Complete the following table and the opposite graph:

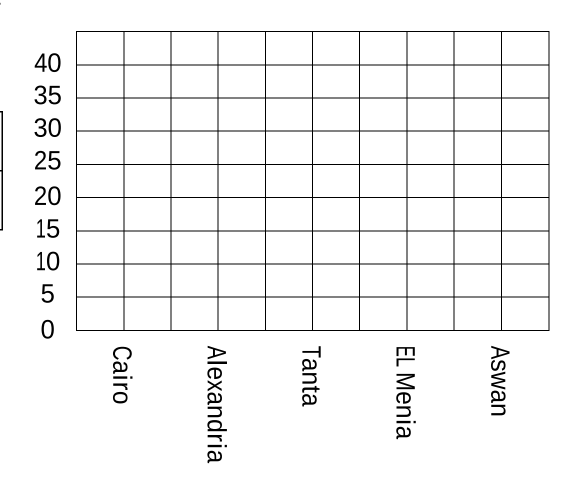


Pupil	Alaa	Fady	Nada	Rana	Mona
Marks	30		20		35

(4) The following table shows the temperature degrees in 5 cities:

City	Cairo	Alex.	Tanta	El Menia	Aswan
Temperature	35	20	30	15	40

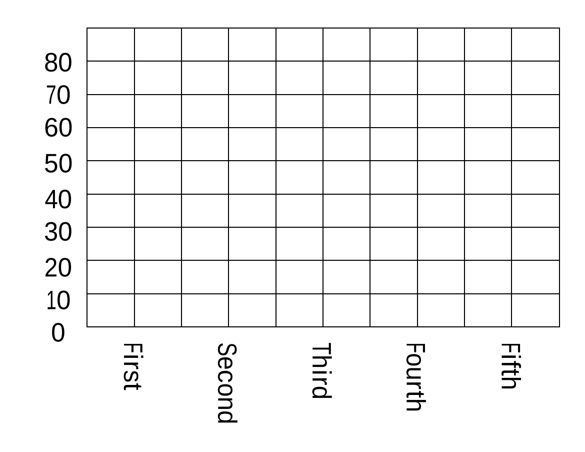
Represent these data by broken-line



(5) The following table shows the heights of five towers:

The tower	1st	2nd	3rd	4th	5th
The height	40	10	50	20	30

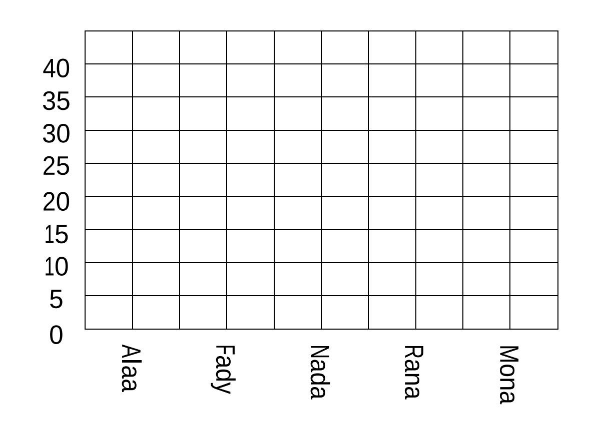
Represent these data by broken-line



(6) The following table shows the marks of five pupils:

Pupil	Alaa	Fady	Nada	Rana	Mona
Marks	30	15	20	25	20

Represent these data by broken-line



Probability

Certain (sure) - Possible - Impossible

أكيد - ممكن - مستحيل

Calculating probability

Remarks :

(1) The probability of the impossible event = zero
(2) The probability of the certain event = 1
(3) The probability of the possible event is between zero and 1 (fraction).

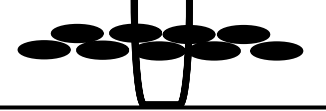
Rule :

The probability of an event occurring = $\frac{\text{the number of possible ways the event can take place}}{\text{the total number of possible outcomes}}$

[1] Complete by write "certain" - "possible" – "impossible":

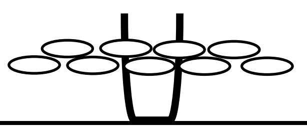
1) It is …………………………… to rain gold
2) It is …………………………… that the sun will rise in the morning
3) It is …………………………… that I will get a high grade in mathematics.
4) It is …………………………… to find a man three metres high

[2] In the opposite figure there are nine black balls in a container. Complete by write "Certain", "possible", "impossible":



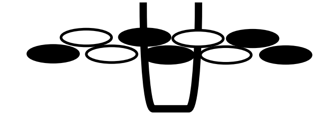
1) It is …………………… to draw a black ball.
2) It is …………………… to draw a white ball.

[3] In the opposite figure there are nine white balls in a container. Complete:



1) It is certain to draw a …………………… ball.
2) It is impossible to draw a …………………… ball.

[4] In the opposite figure there are nine balls in a container Complete by write "certain", "possible", "impossible":



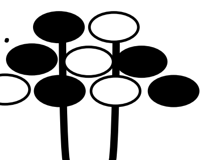
1) It is …………………… to draw a black ball.
2) It is …………………… to draw a white ball.
3) It is …………………… to draw a green ball.
4) It is …………………… to draw a ball.

Calculating Probability

Certain	Possible	Impossible
1	Fraction	0

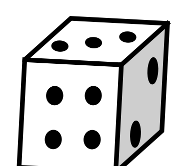
[1] If a container holds 5 black balls and 4 white balls, one ball is drawn blindly

1) The probability of the drawn ball being black = ...
2) The probability of the drawn ball being white = ...
3) The probability of the drawn ball being red = ...



[2] If you throw a dice (die) once, what is the probability of seeing:

1) The number one on the upper face = ……
2) The number 8 on the upper face = ……
3) An odd number on the upper face = ……
4) An even number on the upper face = ……
5) A number greater than six on the upper face = ……



[3] If we flip a coin, we get either a head or a tail. Complete:

1) The probability of getting a head = ……
2) The probability of getting a tail = ……




[4] In a class of 40 pupils, 23 are boys and 17 are girls. One day, one of the pupils was absent.

What is the probability of the absent pupil being a boy? ....
What is the probability of the absent pupil being a girl? ....

[5] Choose the correct answer:

ⓐ The probability of the impossible event = ...

(0 *or* 1 *or* $\frac{1}{2}$ *or* $\frac{1}{3}$)

ⓑ The probability of a certain event is .... (0 *or* 1 *or* $\frac{1}{2}$ *or* $\frac{1}{3}$)

ⓒ If we flip a coin once , the probability of getting a head = ...

(1 *or* $\frac{1}{2}$ *or* 0 *or* 2)

(d) The probability of seeing one black dot on the upper face of a die when throwing it = ... ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{6}$)

(e) The possibility of seeing the number 3 on the upper face of a die when it is thrown = ... ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{6}$ or 1)

(f) The probability of appearance 2 on the face of a dice = ... ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{6}$ or 2)

(g) When you draw a card from 8 cards numbered from 1 to 8 , the probability of getting the number 4 is .... ($\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{1}{8}$ or 4)

(h) A basket contains 5 white balls and 3 yellow balls.
If you draw one ball , the probability of getting a white ball = ... ($\frac{3}{5}$ or $\frac{3}{8}$ or $\frac{5}{8}$ or $\frac{5}{3}$)

(i) The number of pupils in a class is 50 pupils , the number of boys is 20 and the number of girls is 30 , if a pupil was absent is a day , then the probability that the absent pupil is a boy = ... ($\frac{3}{5}$ or $\frac{2}{5}$ or $\frac{1}{20}$)

(j) A letter is selected randomly from the word "EGYPT" , the probability of selecting the letter "P" is .... ($\frac{4}{5}$ or $\frac{1}{5}$ or $\frac{3}{5}$)

(k) A letter is selected randomly from the name "Mostafa" , the probability of selecting the letter "a" is .... ($\frac{2}{5}$ or $\frac{1}{7}$ or $\frac{2}{7}$)

(l) A letter is selected blindly from the name "Hamada" , the probability of choosing the letter "a" is .... ($\frac{1}{2}$ or $\frac{3}{5}$ or $\frac{5}{6}$)

[6] Choose the correct answer:

1. The sun rises in the west ....
   (certain *or* possible *or* impossible)
2. A pupil goes to school ....
   (certain *or* possible *or* impossible)
3. I watch television 4 times a week ....
   (certain *or* possible *or* impossible)
4. I go on a school tripe ....
   (certain *or* possible *or* impossible)

[7]

A box contains 12 balls, 5 balls are white, 4 balls are red, 3 balls are black. Find the probability of each of the following events :

1. The drawn ball is red = ...
2. The drawn ball is white = ...
3. The drawn ball is white or black = ...
4. The drawn ball is white or red or black = ...
5. The drawn ball is not red = ...

[6] Choose the correct answer:

1. As tossing a metallic coin once and observing the upper face , then the probability of appearing a head = ... ($\frac{1}{2}$ *or* 1 *or* zero)
2. The sun rises from east is a .... event.
   (certain *or* possible *or* impossible)
3. The probability of getting an even number when tossing a die once = ... ($\frac{1}{4}$ *or* $\frac{1}{2}$ *or* $\frac{1}{6}$)
4. The probability of the certain event = ... ($\frac{1}{2}$ *or* 1 *or* zero)
5. The probability of the impossible event = ...
   ($\frac{1}{2}$ *or* 1 *or* zero)
6. The probability of the number 8 when tossing a die once = ...
   ($\frac{1}{8}$ *or* 1 *or* zero)
7. The probability of getting a number less then 3 when a die is tossed once = ... ($\frac{1}{3}$ *or* $\frac{1}{2}$ *or* $\frac{1}{6}$)
8. The probability of getting a number less then 1 when a die is tossed once = ... (zero *or* $\frac{1}{2}$ *or* $\frac{1}{6}$)